Colorado State Teachers College BULLETIN

SERIES XXI OCTOBER 1921 NUMBER 7

COURSE OF STUDY

of the

ELEMENTARY TRAINING SCHOOL



Published Monthly by State Teachers College, Greeley, Colorado. Entered as Second-Class Matter at the Post Office at Greeley, Colorado, Under the Act of August 24, 1912



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Foreword

It is impossible to give credit separately to all the sources from which the material has been drawn for this course of study. Many publications and persons have given valuable assistance. Special indebtedness is acknowledged to the teachers of the ELEMENTARY TRAINING SCHOOL and COLLEGE who have taken any part in the writing of this course of study. The director of the training schools has attempted to unify the material on the basis of a definite series of modern educational principles.

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W. D. ARMENTROUT, Director of Training Schools.

Elementary Training School

The elementary training school is an educational laboratory where educational problems are being worked out under the direction of skilled experts. New methods that save time, new schemes for better preparing the children for the real needs of life, new curricula and courses of study are continually considered and tried out, provided they are sound educationally. The aim is not to develop a school that is entirely different from the elementary schools of the state but to reveal conditions as they are and AS THEY SHOULD BE. The elementary training school strives to be the leader in the state in all that is new and modern. Effort is made to maintain such standards of excellence in the work that it may at all times be offered as a demonstration of good teaching under conditions as nearly normal as possible in all respects.

The elementary training school is a complete elementary school unit containing kindergarten, first, second, third, fourth and fifth grades. The sixth, seventh and eighth grades are organized on the departmental plan for the purpose of exploring and diagnosing, earlier than usual, the interests, attitudes, and abilities of pupils, and at the same time provide better for individual differences. This organization affords a splendid opportunity for studying junior high school problems.

AIMS AND PURPOSES OF ELEMENTARY EDUCATION.

It is the purpose of the Elementary School to provide experience to meet the common needs of all, regardless of sex, vocation or social status. Its content is made up of those activities in which every one must participate with a like degree of knowledge and skill and with like attitude and appreciation in order that there may be an efficient social life. Its activities, values and ideals may be regarded as "the common denominator of life for the whole nation." It deals with children during a period in their lives when their general tendency to action, thought and feeling, are most nearly alike and most susceptible to common appeal. It deals with social problems which are the same for all. It applies itself to the development of that knowledge, of those habits, attitudes and ideals and of those appreciations which enable people to understand each other, to share in the common life, and to co-operate in realizing common purposes. This, of course, does not mean that the facts of individual differences in children are to be neglected in the elementary school. In method of teaching, individual differences are of profound importance, but the content of activities-"the understanding of how the needs of life are met, the experience of the race in living, the value to life of interests and activities as found in history and literature, the ways of recreation, present and past, the tools used by man as reading, writing, number, drawing, me-chanical skills and devices for group activity"—may and should be the same in the elementary school for all children everywhere. This content appropriate for the elementary school is equally of interest and value to boys and girls.

Only that school work which bears a vital relationship to some worthy life purpose can be justified. Only that activity which can be appreciated for its worth by the pupil can be said to be truly educative. If no identity can be appreciated by the pupil between the activities which he experiences in school and some life purpose to which it contributes there is no basis whatever for attributing any life value to the activity. Schools have no basis for existence except that of providing helpful means and experiences in meeting the problems and various needs of life itself. The elementary school, therefore, justifies itself in the measure in which it equips individuals to engage in the activities of life efficiently. Only as the knowledge, habits, skill, attitude, ideals and appreciations developed in the elementary school are operative in meeting the problems of life are these of any worth.

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FACTORS DETERMINING A COURSE OF STUDY.

The problem in selecting the content of the elementary school curriculum is that of first determining the objectives of life in terms of different needs. Second, finding the means or forms of activity best adapted to meet these needs, and third, presenting these needs with the activities for meeting them.

Dr. Bonser classifies the general aims of life in terms of four large br. Bonser classifies the general annus of the terms of root large fields of purposeful activity. First, the health activities of everyday life. Second, the practical activities of everyday life. Third, the co-operating activities of everyday life, and fourth, the recreational ac-tivities of everyday life. If we consider these aims then the purposes of the elementary school are to provide a basis for health equally desirable for all; to develop practical efficiency in activities shared by all in daily work and intercourse; to develop ideals and habits of group activity of equal value to all; and to cultivate means of recreation common to all.

Many similar classifications can be made of the aims of the school in terms of life purposes. Any normal individual can be found at any time living, thinking, feeling, and acting in one or another of five major fields of activity; in the home, at work, at play, in the field of social intercourse, or in organized community life. These are the five classes of relationships and activities for which the elementary school must educate its pupils.

In studying the forces which brought the school into existence we get another similar classification. The school is an institution established, organized and maintained by society for the purpose of developing its own efficiency. Social efficiency has been analyzed into five types; physical efficiency, moral efficiency, vocational efficiency, avocational efficiency and civic efficiency. Therefore the elementary school must equip its pupils with the necessary knowledge, habits, skills, attitude, ideals and appreciations which will enable them to become efficient in health, in morality, in recreation, in work and in citizenship.

In accomplishing all of these large life problems the only means of growth is by effective and satisfied participation in these activities. Meeting each day's needs of childhood is the best preparation for meeting the needs of adult life. Therefore, the curriculum should be, as far as possible, a series of purposeful activities in meeting life's needs in the best way. The teachers' problem lies in helping to bring about the filling of these needs in some orderly arrangement, and in so directing the activities that pupils discover and use the most pertinent knowledge and the best methods of procedure. A course of study can never be finished but is always in the process

of making. Because of the ever changing forms of activity by which the purposes of life are realized the curriculum must correspondingly change. As new needs arise, as new methods of meeting needs are de-veloped the curriculum must respond to all of these changes which are desirable and more effective in meeting life's purposes. This includes the dropping from the curriculum of activities that are no longer used and of less value than newer methods.

BIBLIOGRAPHY ON AIMS OF EDUCATION.

Betts, G. H., "Social Principles of Education." Chapters X, XI, Scribners. Bonser, F. G., "The Elementary School Curriculum." Ch. I-V. Macmillan. Charters, W. W., "Methods of Teaching." Ch. I-VI. Houghton, Mifflin. Dewey, John, "School and Society."

Dewey, John, "Interest and Effort." Houghton, Mifflin Company. Kendal & Mirick, "How to Teach the Fundamental Subjects." Chapter I. Moore, E. C., "What Is Education." Chapters I-X. Ginn and Company. Moore, E. C., "What the War Teaches Us About Education." Chapter I, II, III, IV, XIV, XV. Macmillan Company.

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Aims and Methods in Habits of Study

1. Pupils must be convinced that getting the meaning of the author from a printed page is quite different from repeating meaningless expressions found there.

2. Pupils must be taught to eliminate from consideration material of minor importance if important matter is to be given proper attention.

3. Ability to formulate intelligent questions is an indication that the pupil has some knowledge of the related and essential facts in the paragraph or the page under discussion.

4. Making a simple outline after having discovered the essential facts is a great help in memorizing desirable information.

5. Much valuable time can be saved if pupils have an adequate knowledge of how to use a textbook.

6. Special practice should be given in the use of the index, table of contents, references, the appendix, use of foot-notes, chapter, section and paragraph headings, and list of general references.

7. Pupils should be given training in selecting important things in a sentence, paragraph and page.

8. Pupils should be given training in writing intelligent questions about a paragraph or page. 9. Pupils should be given training in collecting information sug-

gested by simple outline.

 Skill in use of chapter, section and paragraph headings.
 Use of outlines in summarizing thought and selecting important facts.

12. Definite reference should be given in the assignment to particular paragraphs or sections which pupils read and tabulate the important facts that furnish the desired information.

13. Discover whether pupils understand adult expressions used in text books.

14. Pupils should be required to prove their statements by reference to the text book.

BIBLIOGRAPHY.

Dearborn, Geo., "How to Learn Easily." Little, Brown & Co. Hall-Quest, Alfred, "Supervised Study," Macmillan Co. Earhart, Lida B., "Teaching Children to Study." Houghton Mifflin Co.

Kitson, H. D., "How to Use Your Mind," Lippincott. McMurray, F. M., "How to Study and Teaching How to Study," Houghton Mifflin Co.

Simpson, Mabel E., "Supervised Study in History," Macmillan Co. Whipple, Guy M., "How to Study Effectively," School and Home Publishing Co.

Wilson, H. B., "Training Pupils to Study." Warwick and York.

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In everyday life, the facts and processes of arithmetic are used only in situations requiring relationships of measurements in units of quantity or value. The simplest and least difficult question is that of mere serial order—how many? Beyond this are the questions of how much, in terms of inches, feet, pounds, dozens, and so on, and at what cost, or profit, or loss, in terms of money values on the basis of these various units. The general daily uses of arithmetic are chiefly those concerned with the measurements and values of the goods used for food, clothing, furnishings, utensils, tools, and the means of communication, transportation and recreation. In supplying ourselves with these or in supplying them to others, arise most of the problems calling for the use of number as a tool. In interpreting the meaning of situations of which we are a part, or of which we read, a knowledge of number is required, often involving quantities, values and relationships quite be-yond those which enter into our direct manipulation of amounts and processes. For direct usage as a tool, habits of mental manipulation highly accurate and rapid are required; for interpretation, an understanding of meaning and significance only is necessary.

Surveys of the social usage of arithmetic emphasize the relatively small range of kinds of situations calling for the use of arithmetic, the relatively small quantities and values involved, the relatively small number of processes, and the great frequency with which these processes recur. Such surveys show a fair degree of proficiency in the manipu-lation of processes as such—a possession of the facts and processes of arithmetic—but they show also a deplorable want of knowledge of how to use these processes in solving many of the important problems of daily life with economy and efficiency. The work in the schools has developed the tool without teaching its use. When we recall how largely the work in arithmetic has been taught as a thing apart and separate from the situations in life in which it is used the result is not surprising. The remedy lies in developing, as far as possible, the facts and processes of arithmetic as parts of projects or problems requiring their use as tools and means of interpretation.

An Outline of Elementary Mathematics

- I. Counting Numbers.
- II. Reading Numbers.
 - Integers-Arabic and Roman. (1)
 - (2)Common Fractions.
 - Decimal Fractions. (3)
 - Denominate Numbers. (4)
- III. Writing Numbers.
 - Integers-Arabic and Roman. (1)
 - (2)
 - Common Fractions. Decimal Fractions. (3)
 - Denominate Numbers. (4)

IV. The Processes

- (1)Addition
- (2)Substraction
- (3) Multiplication
- (4)Division

Of

- V. Percentage Applications
 - Trade and Commercial Discount. (1)
 - (2)Profit and Loss.
 - (3)Commission.
 - (4). Simple Interest.

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Integers.

Common Fractions, Decimal Fractions.

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VI. The following subjects treated largely for information purposes: (1)Taxes.

- (2)Insurance.
- (3) Mortgages.
- (4) Stocks and Bonds.
- (5) Bank Discount.(6) Compound Interest.
- (7)Accounts.

VIII. Denominate numbers in useful problems of community value.

VIII. Concrete Geometry-intuitional and observational.

- Geometry of Form (1)
 - (a) What is the shape of the object?
- (2)Geometry of Size
 - (a) How large is the object?
- (3)Geometry of Position
 - (a) Where is the object? Supplementary Work
- (4)
 - (a) Squares and square roots.
 - (b) Pyramids.
 - (c) Cones and spheres.

IX. Algebra

- (1)Simple formulas
- (2)The equation
- (3) The graph
- (4) Negative numbers
- (5) Algebraic operations
- (6) Practical use of algebra in problems in business.

First Grade

The purpose or aim in the First Grade is to develop by concrete means, a number sense which shall later lead to skill and accuracy. All material and its use should be determined by the child's needs and experience.

Very little time is given to formal number work as such. The number of groups of things of a kind all about the child stimulate his interest in counting and he develops the notion of serial relations almost incidentally. Reading numbers as found on pages of books, calendars, on streetsigns, at corners, on houses, on clocks, etc. All these and many more give splendid opportunity for learning the number symbols. Real problems should arise which involve the use of inch, foot and yard; pint, quart, half gallon and gallon; pound and halfpound; dozen and half dozen; cent, nickel, dime, quarter and dollar.

Near the close of the year several short periods a week may be used for practice if the number facts reveal a need for greater facility.

Second Grade

The second year begins dealing more formally with number rela-tions and attempts abstraction. In the second (and each subsequent year in the primary grades) the teacher must not lose sight of the two phases of number work—that of using number for immediate needs, and that of gaining control over the symbols of numbers. Advantage should be taken of all opportunities for using number. They occur in measuring and making booklets, seed envelopes, card boxes, calendars, in other forms of construction, and in counting and keeping the score in games. The formal work should be introduced, if possible, in answer to some need. A pupil must learn to make figures well and rapidly, but the immediate end may be set up of learning to make figures well and rapidly in order to keep the score in games. The formal teaching of number begins, practically, in the second year. The pupil's equipment is the ability to count objects and to recognize figures. This ability

varies in different pupils, but in each case it forms the basis from which to proceed. Counting, repeating the number names in a series, is the primitive response to a "how many" situation. It is customary to teach second-grade pupils to count to one hundred orally, and to write figures to one hundred. In the writing, for convenience, the figures are often grouped in tens.

It is possible to use this device much more effectively than is usually done. If, before emphasizing the oral counting, the pupil can have in his hand a number scale in large, clear figures, as in Table 1, time will be economized.

The counting should be first from this scale, so that each number name corresponds to a symbol. When the child says "eleven, twelve, thirteen, fourteen," he looks at the figures "11, 12, 13, 14." He thus organizes the numbers 1-100, so that the numbers have certain space relationships in his mind and can be easily recalled. The work on form must follow and grow from work which is concrete. These tables, through the visualization of symbols and space relationships of numbers, are designed to assist in the process of abstraction. If in counting from memory the pupil hesitates; he should look at once at his number scale, and, as in the beginning, read the figures, after which he can repeat them readily. Visualization should be emphasized in the early formal work.

The first counting should be by 1's; begin at 1, count to 100. Follow by counting in groups of 10; in the last column, J, begin with 10, count to 100; first column A, begin with 1 and count by 10s to 91; in the same way count each column by 10's. Count each column in reverse order, for example, in column B begin at 92, count to 2. Pupils should learn to write figures to 100. An immediate use is the making of inchsquare number cards on gray bogus paper. These are kept in boxes or trays and furnish a profitable form of seat work. The pupils place the cards on the desk to show the groups of 10's, A-J.

Table I

NUMBER SCALE.

	A	В	С	D	Е	F	G	Н	Ι	J
1-	1	2	3	4	5	6	7	8	- 9	10
2	11	12	13	14	15	16	17	18	19	20
3—	21	22	23	24	25	26	27	28	29	30
4—	31	32	33	34	35	36	37	38	39	40
5—	41	42	43	44	45	46	47	48	49	50
6—	51	52	53	54	55	56	57	58	59	60
7-	61	62	63	64	65	66	67	68	69	70
8	71	72	73	74	75	76	77	78	79	80
9	81	82	83	84	85	86	87	88	89	90
10—	91	92	93	94	95	96	97	98	99	100

For diversity in grouping Table II is given. Each group of 10's is arranged in vertical instead of horizontal lines. It is used in the same way.

Following the counting by 1's, 10's and 5's, count by 2's. Beginning with zero touch, while counting, the even numbers; beginning with 1 touch, while counting, the odd numbers. Subsequently count from memory. Count by 8's and by 4's through the first three or four groups. Count by adding to lines A-J numbers 1 to 9, as, add 4 to each number in line E: 5 plus 4 equal 9, 15 plus 4 equal 19, 25 plus 4 equal 29, to 95 plus 4 equal 99; subtract, similarly, as in Table I, column C, 3 minus 3 equals zero, 13 minus 3 equals 10, to 93 minus 3 equals 90. Following actual substraction with objects this scale may be used to advantage with pupils who are unable to make the abstraction readily.

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For example, in the problem 9 minus 5, begin at 9 in row (1); count back 1, 2, 3, 4, 5; the figure 4 indicates the number that remains; also, the places 1, 2, 3, 4, show it.

Table II

NUMBER SCALE.

A—	1	11	21	31	41	51	61	71	81	91
B	2	12	22	32	42	52	62	72	82	92
C—	3	13	23	33	43	53	63	73	83	93
D	4	14	24	34	44	54	64	74	84	94
E—	5	15	25	35	45	55	65	75	85	95
.F-	6	16	26	36	46	56	66	76	86	96
G—	7	17	27	37	47	57	67	77	87	97
H—	8	18	28	38	48	58	68	• 78	88	98
I—	9	19	29	39	49	59	69	79	89	99
J—	. 10	20	30	40	50	60	70	80	90	100

The intention of Table III is to lessen the difficulties of learning the addition combinations by building them up by counting and by showing them all upon one page. If often seems that pupils become lost in the maze of addition combinations and experience the uncertainty and dis-tress of one who has lost his way. The pupil does not know what new combinations may leap out at him from the region of unknown things. But if he sees the primary sums, all of them, and learns that there are only forty-five, the task of learning them becomes much more definite and possible. After the combinations have been learned by counting, as in columns A to I, Table III, is useful in speed drills. A class goes to the board with instructions to write column 3. The pupils begin at a signal. The one who finishes first says "1," and makes the figure "1" over his work. Each, as he finishes, announces and records his place. The teacher checks on accuracy. At the end of the recitation it is of interest to observe the different scores. The teacher should try to account, to herself at least, and by observation while the work is in pro-gress, for the variation in speed of a given pupil, for example, if the score is 1-4-2-1, why did the pupil drop to fourth place in the second exercise. In using Table III at the desks the pupils build the primary sums with their inch-square number cards, varying the order each day. Substraction is developed by counting, using Table III, as minus 1 equals zero, 2 minus 1 equals 1, continuing through lolumns A to I.

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Table III

THE 45 PRIMARY SUMS.

A—	(1) 1 1	(2) 2 1	(3) 3 1	(4) 4 1	(5) 5 1	(6) 6 1	(7) 7 1	(8) 8 1	(9) 9 1
B—	2 2	32	42	5 2	6 2	$\frac{7}{2}$	8 2	9 2	
С—	3 3	43	5 3	6 3	7 3	8 3	9 3		
D—	4 4	5 4	6 4	7 4	8 4	9 4			
E	55	6 5	7 5	8 5	9 5				
F—	6 6	76	8 6	9 6					
G—	$\frac{7}{7}$	8 7	9 7						
Н—	8 8	9 8							
I—	9 9						•		

Table IV presents the differences in varying order. The pupils are encouraged to arrange the "problems" in a different order each day when placing them on their desks with inch-square number cards. It is very important that the addition and substraction processes be closely associated. When 4 and 3 are combined to make 7, at once separate each addend from the sum; 7 minus 3 equals 4, 7 minus 4 equals 3.

Table IV

THE 45 PRIMARY DIFFERENCES.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A	1	2	3	1	2	4	1	3	1
B		1	2	4	5	2	5	2	7
C			1	3	3	5	3	1	9
D				2	4	3	4	6	4
E					1	6	2	8	5
F						1	7	4	6
G—							6	7	3
H								5	8
I—									2

Following the counting for becoming familiar with the number spaces 1-100 should come counting by 2's, 3's, 4's, etc., within the first two groups of ten, as an aid in learning the combinations. For example, the pupil counts by 4: beginning with zero:

144 MAC											
	0.	4.	8.	12	In	reverse	order:	12,	8,	4,	0
		5,					oruori	13,	9,	5,	1
		6,						14,	10,	6,	2
		7.						15,	11,	7,	3

Table V gives further drill in addition and substraction. The pupils are not to read the problems, as 4 plus 3 equal 7; but simply name the sums and differences. The purpose of this work is to make pupils able to recognize the primary combinations instantly, and to speak or to write them instantly. The use of perception cards $(3x5\frac{1}{2})$ inches on which each figure is at least an inch and a half) is valuable.

Table V

ADDITION

	Read si	ign +	plus.	Read	1 0, ze	ero.					
4	1	5	2	3	4	7	0	2	0	5	7
+3	2	4	7	2	0	1	5	4	8	5	3
		_	-		-			_	_		
4	9	2	6	4	0	3	6	1	6	3	9
+2	1	0	1	5	0	4	3	5	2	0	0
_		-	_	_	-	-		-	-	-	_
3	6	5	3	9	4	2	4	8	7	6	9
+3	9	2	7	7	1	2	7	5	4	0	9
3	0	6	7	8	9	0	7	10	8	6	8
+9	10	4	5	6	2	11	8	4	9	5	7
_	-	_	_		_			_		_	_
9	5	8	9	7	9	6	3	0	7	4	5
+8	6	7	3	7	6	7	5	7	6	7	8
-	-	-	-			-		-	_		-
				SU	BSTR	ACTIC	N				
Read											
	d sign -	- min	us. R	ead 0.	zero.						
6	0	$-$ min $\frac{1}{8}$		ead 0, 5	zero. 7	9	11	2	12	8	6
$^{6}_{-2}$	d sign - 7 5	- min 8 1	us. R 4 2	ead 0, 5 0		9 2	11 5	2 0	$12 \\ 5$	8 3	6 3
-2	7 5	8 1	4 2 —	5	7		5	0		3	3
$\frac{-2}{11}$	7	8	4	5	7	$\frac{2}{7}$		$\frac{0}{4}$			$\frac{3}{3}$
-2	7 5	8 1	4 2 —	5 0	73	2	5	0	5	3	3
-2 -11 -2 -2	75	8 1 3 0	4 2 13 5	$5 \\ 0 \\ \overline{14} \\ 7 \\ \overline{}$	7 3 9 4	2 7 3		$\begin{array}{c} 0 \\ \hline 4 \\ 1 \\ \hline \end{array}$	5 18 9	$\frac{3}{10}$	$\frac{3}{3}$
-2 -11 -2 -15	7 5 8 5 9	$ \begin{array}{c} 8\\ 1\\ -3\\ 0\\ -7\\ \end{array} $	$\begin{array}{r} 4\\ 2\\ \hline 13\\ 5\\ \hline 13\\ 13\end{array}$	$5 \\ 0 \\ \overline{14} \\ 7 \\ \overline{10}$		$\begin{array}{c} 2\\ \hline 7\\ 3\\ \hline 12 \end{array}$		$\begin{array}{c} 0\\ -4\\ 1\\ -1\\ 1\end{array}$	5 $\overline{18}$ 9 $\overline{16}$	$\frac{3}{10}$ $\frac{7}{7}$	$ \frac{3}{3} \frac{3}{2} \frac{4}{4} $
-2 -11 -2 -2	75	8 1 3 0	4 2 13 5	$5 \\ 0 \\ \overline{14} \\ 7 \\ \overline{}$	7 3 9 4	2 7 3		$\begin{array}{c} 0 \\ \hline 4 \\ 1 \\ \hline \end{array}$	5 18 9	$\frac{3}{10}$	$\frac{3}{3}$
	7 5 8 5 9 3		$ \frac{4}{2} \\ \overline{13} \\ \overline{5} \\ \overline{13} \\ \overline{7} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ $	$ \begin{array}{r} 5\\0\\\hline 14\\7\\\hline 10\\5\\\hline -\end{array} $	7 3 9 4 8 4	$\begin{array}{c} 2 \\ \hline 7 \\ 3 \\ \hline 12 \\ 5 \\ \hline \end{array}$		$ \begin{array}{c} 0 \\ -4 \\ 1 \\ -1 \\ 0 \\ \end{array} $	5 18 9 16 8 $-$	$\begin{array}{r} 3\\ \hline 10\\ 7\\ \hline 7\\ 2\\ \hline \end{array}$	3 3 2 4 0
$ \begin{array}{r} -2 \\ \overline{11} \\ -2 \\ \overline{15} \\ -7 \\ \overline{12} \end{array} $	7 5 8 5 9 3 9 9	$ \begin{array}{c} 8\\1\\\\ \hline 3\\0\\\\ \hline 7\\1\\\\ \hline 7 \end{array} $	$ \begin{array}{c} 4 \\ 2 \\ 13 \\ 5 \\ 13 \\ 7 \\ 17 \\ 17 \end{array} $	$5 \\ 0 \\ 14 \\ 7 \\ 10 \\ 5 \\ 15$	$ \begin{array}{r} 7 \\ 3 \\ 9 \\ 4 \\ 8 \\ 4 \\ 7 \end{array} $	$\begin{array}{r} 2\\ \hline 7\\ 3\\ \hline 12\\ 5\\ \hline 11 \end{array}$	5 12 6 -9 6 13	$\begin{array}{c} 0\\ \hline 4\\ 1\\ \hline 1\\ 0\\ \hline 15 \end{array}$	5 $\overline{18}$ 9 $\overline{16}$ 8 $\overline{14}$	$\begin{array}{r} 3\\ \hline 10\\ 7\\ \hline 7\\ 2\\ \hline 12 \end{array}$	
	7 5 8 5 9 3		$ \frac{4}{2} \\ \overline{13} \\ \overline{5} \\ \overline{13} \\ \overline{7} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ \overline{-} \\ $	$ \begin{array}{r} 5\\0\\\hline 14\\7\\\hline 10\\5\\\hline -\end{array} $	7 3 9 4 8 4	$\begin{array}{c} 2 \\ \hline 7 \\ 3 \\ \hline 12 \\ 5 \\ \hline \end{array}$		$ \begin{array}{c} 0 \\ -4 \\ 1 \\ -1 \\ 0 \\ \end{array} $	5 18 9 16 8 $-$	$\begin{array}{r} 3\\ \hline 10\\ 7\\ \hline 7\\ 2\\ \hline \end{array}$	3 3 2 4 0
$ \begin{array}{r} -2 \\ -1 \\ -2 \\ -2 \\ -1 \\ -2 \\ -7 \\$	7 5 8 5 9 3 9 5		$ \begin{array}{c} 4 \\ 2 \\ 13 \\ 5 \\ 13 \\ 7 \\ 17 \\ 9 \\ - \\ \end{array} $	$5 \\ 0 \\ 14 \\ 7 \\ 10 \\ 5 \\ 15 \\ 8 \\ -$	$ \begin{array}{r} 7 \\ 3 \\ 9 \\ 4 \\ 8 \\ 4 \\ 7 \\ 6 \\ - \end{array} $	$\begin{array}{r} 2\\ \hline 7\\ 3\\ \hline 12\\ 5\\ \hline 11 \end{array}$	5 12 6 -9 6 13	$ \begin{array}{c} 0 \\ -4 \\ 1 \\ -1 \\ 0 \\ -5 \\ 6 \\ - \\ \end{array} $	5 18 9 16 8 14 6		
$ \begin{array}{r} -2 \\ \overline{11} \\ -2 \\ \overline{15} \\ -7 \\ \overline{12} \end{array} $	7 5 8 5 9 3 9 9	$ \begin{array}{c} 8\\1\\\\ \hline 3\\0\\\\ \hline 7\\1\\\\ \hline 7 \end{array} $	$ \begin{array}{c} 4 \\ 2 \\ 13 \\ 5 \\ 13 \\ 7 \\ 17 \\ 17 \end{array} $	$5 \\ 0 \\ 14 \\ 7 \\ 10 \\ 5 \\ 15$	$ \begin{array}{r} 7 \\ 3 \\ 9 \\ 4 \\ 8 \\ 4 \\ 7 \end{array} $	$2 \\ -7 \\ 3 \\ -12 \\ 5 \\ -11 \\ 6 \\ -$	$ 5 \overline{12} 6 \overline{9} 6 \overline{13} 8 \overline{9} $	$\begin{array}{c} 0\\ \hline 4\\ 1\\ \hline 1\\ 0\\ \hline 15 \end{array}$	5 $\overline{18}$ 9 $\overline{16}$ 8 $\overline{14}$	$\begin{array}{r} 3\\ \hline 10\\ 7\\ \hline 7\\ 2\\ \hline 12 \end{array}$	$ \begin{array}{c} 3 \\ 3 \\ 2 \\ -4 \\ 0 \\ -9 \\ 0 \\ - \end{array} $

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PERCEPTION CARD

The teacher exposes the card an instant; the pupil gives the sum or difference as directed. If he misses, he takes the card and reports the combination correctly when he hands it back at the close of the recitation. By shifting the perception cards the teacher makes sure that the pupils are able to recognize the combinations in any order.



Table VI

DOUBLE OF NUMBERS

			G	JOUD			I D LIED				
R	lead si	gns:	+ plu	ıs, —	minus	. Lea	rn douk	oles of	numb	ers.	
1	2	3	4	5	6	7	8	9	10	11	12
+1	2	3	4	5	6	7	8	9	10	11	12
	-	120									
T	Tao da	hlen	. C						1	1	
Road	from t	ubles	$\frac{01}{2}$ nu	nbers	as a	guiae	in add	lition a	and su	ibstrac	tion.
									-	-	-
2	2	2	3	3	3	4	4	4	5	5	5
+2	3	1	'3	4	2	4	5	3	5	6	4
			_		-			-			
6	6	6	7	7	7	8	8	8	9	9	9
+6	7	5	7	8	6	8	9	7	9	10	8
-		-	-				-			-	
10	10	10	11	11	.11	12	12	12			
+10	11	9	11	12	10	12	13	11			
	_	_									
R	ead fr	om to	n: as.	6 mi	nus 4	equal	2				
2	3	4	4	4	5	6	6 6	7	8	8	8
-1	3	2	3	1	5	3	4 2		4	5	3
	_	_								0	0
9	10	10	10	11	12	12	12	13	14	14	14
-9	5	6	4	11	6	7	5	13	7	8	6
-	_	-		**			0	10		0	0
15	16	16	16	17	18	18	18	19	100		
-15	8	9	7	17	9	10	8	19			
10	0	0		11	9	10	0	19			
20	20	20	91	99	90			94	94		
	20	20	21	22	22	22	23	24	24	24	
-10	11	9	21	11	12	10	23	12	13	11	
		-		-					-		

Table III, column (1) presents the doubles of numbers below ten. They are easily learned in the forty-five primary sums of which they constitute one-fifth. The knowledge of these furnishes a guide in addition and subtraction. Table VI suggests the use of this knowledge in learning and recalling primary sums and differences. For instance, 8 plus 8 equal 16; 7 is 1 less than 8; hence 8 plus 7 equal 1 less than 16, or 15; 8 plus 8 equal 16; 9 is 1 more than 8; hence 8 plus 9 equal 1 more than 16, or 17. When the pupil has the idea of using the double of a number as a guide in addition or substraction he is able to do it instantly without any formal explanation.

Counting by 10's is an easy form of adding or subtracting. Pupils often consider adding 9 difficult. This difficulty may be removed by using 10 as a guide in adding 9 as suggested in Table VII.

Table VII ADDITION

T	en.	It is e	easy	to a	dd te	n to a	ny nu	mbei	r. R	ead lo	wer n	umber f	first:
as 1 1 10	10	10 eq 10	10	^{11.} 10	10	10	10	10	10	10		10 10	10
+1	2	3	4	5	6	7	8	9	10	11	12	13 14	15
N	ine.	9 is	1 le	ess th	nan 1	0. Th	e sun	n of	9 an	d any	num	ber is 1	less
than t any n	he s umb	um of er.	E 10	and	that			se]				adding	
10	9	$\frac{10}{3}$	93	10 4	9 4				111	$ \begin{array}{ccc} 0 & 9 \\ 7 & 7 \end{array} $	10 8	1110	0999
+ 2	2	9	9	4							Ŭ		
						Fabl						V	
					TA	BLE	OF T	wo	'S				
1	2	3	-	4	5	- 6	- 7	7	8	9	10	11	12
		2		2	2	2	2		2	2	2	2	2
$\frac{2}{2}$	2	2		2	2	2			2	2	2	2	2
4				2	2	2			2	2	2	2	2
	4	_2											2
		6		2	2	2		2	2	2	2	2	
				8	2	2	• 2		2	2	2	2	2
					10	2	2	2	2	2	2	2	2
						12	2	2	2	2	2	2	2
							14	ł	2	2	2	2	2
									16	2	2	2	2
										18	_2	2	2
											20	_2	2
Ľ												22	2
									1.5				24

In the counting by 2's from the number scales, Tables I and II, the equivalent of the multiplication table of two's has been developed. These facts may be thrown into the form of Table VIII. Use this for both multiplication and division; 9 times 2 equal 18. How many 2's in 18? There are nine 2's in 18.

Third Grade, B Class

Review.

Combinations and separations should be thoroughly reviewed. Emphasis should be placed upon speed in this grade.

New Work.

Reading and writing numbers with the	ree order	s.					
Addition through series work as		31	41	51	61	71	
i i	4	4	4	4			
	10 de 1				-	-	
Place right hand figures first in addition Substraction the same.	of this l	kind.					
Addition by 2's, 3's, 4's, and 5's. Exampl	е		1	2 4	1	1	
			3	4	4	5	
Teach carrying in addition.			5	6	7	9	
Give two-column addition and subtract	tion.		7	8	10	13	
			9	10	13	17	
			·		-		

Teach multiplication and division tables to the 6's. Have only one digit for the multiplier and divisor.

Teach division in the following ways:

3/3 = 1

 $3 \div 3 = 1$

1/3 of 3=1

Children should know that $75 \div 3$ means the same as (3)75.

Give only even division problems with two and three numbers in the quotient.

Games.

1. Number race. Divide blackboard into spaces. In each space, place simple number combinations or examples in separations or multiplication tables. Select two children to run a race. Start one child at A and the other at B. The one running the greatest number of miles correctly wins the race.

2. Fireman game. Draw windows at the top of the blackboard. Have ladders reaching up to them. Place combinations or separations on the rounds of the ladder. The child is to see if he can climb the ladder without falling, or he may descend the ladder without accident.

3. Post Office. Prepare cards about six inches long and four inches wide. On the side of these write a number story with answer as 6+4=10. On the blackboard all around the room write the numbers from two to ten, and then choose a child to live in each house, represented by a number and by Mrs. 2, Mr. 3, or Mr. 4, as the case may be. Then elect yourself postmaster, and choose, as carriers, children who especially need drill in the number work. Each carrier is given a letter (one of the cards) which he must take to the right house. Have a rigid system in the post office by which the carriers go out from one side of your desk and return at the other side. As soon as they return they announce the number story they had and the house where they took it. This helps them to visualize the number facts. If they forget, they are sternly sent back to the house to discover what the number fact was. This helps the memory. Sometimes the carrier makes a mistake and delivers a letter to the wrong house. Then the child receiving the letter hastens to the postmaster to report the mistake. The posmaster apologizes and sends the carrier back to correct his error.

4. The Race. Ten or fifteen combinations are written on a row on the board. The two children chosen pass to opposite ends. At the signal they begin writing the answers. When they meet, a line is drawn and each counts the problems he has answered. Compare the numbers of answers. This gives a good opportunity for more than and less than work.

5. Mush Pot Game. The children form a circle, teacher standing in the center with drill cards. The cards are exposed to each child in turn. If the answer is incorrectly given, the child goes into the mushpot. When the round is made the children in the center are given an opportunity to get back in the circle by giving the correct answer to the card they hold. They still retain the card, however, until the game is over, then it is easy to check up to each child his individual problem. This game may be played in a different manner. The first child

who misses goes into the mush pot without his card, which is passed to the next child, as soon as he tells or catches another card, he goes into the circle, and the one caught takes his place in the center.

Half of the time should be given to oral work. All review in abstract work should be given without thinking or counting. The following terms should be understood: add, addition, subtract, subtraction, multiply, divide, sum, remainder, difference. The child should be taught the use of the following signs: $+ - \times \div$

Third Grade, A Class

Review all the work previously outlined. New Work.

Read and write numbers to 4 orders.

Complete multiplication tables through the 9's. Division same.

In multiplication, let the multiplier be one digit.

Let all short division be even.

Teach the process of borrowing, but say "take."

Give one step problems in addition, subtraction and multiplication. As reasoning is the basis of concrete work much oral drill should

be given, the teacher and class working together, that correct habits of attacking a problem may be formed. The steps necessary to solve problems orally with objects will be the basis for solving written problems. Work many of the written or book examples orally, using a few principles that will apply to most examples.

Read the problems carefully.

What am I asked to find?

What is known?

How will I find it?

In multiplication, make a statement similar to this:

A boy earns \$6 in one week. In 2 weeks, he earns 2 times \$6 or \$12 (not 2×6).

Give store problems involving the use of money. The same achievements should not be expected from all classes nor from all individuals.

Standards should vary with the amount of drill given. Knowledge of the process is the first standard, accuracy follows next and then speed.

Allowance should be made for the slow pupil. In records based on time, each pupil should be encouraged to raise his own previous record, and to advance until he has reached his limit.

Place the standard above the average of the class. Keep a record so that each may know whether he is advancing toward this standard or has exceeded it.

About one-half of the time should be given to oral drills. Emphasize the oral drills in multiplication and division. Keep up the drill work on the combinations and separations.

Use games listed for Third B. Class.

General Suggestions GRADES 4-5-6

Abstract problems deal with number purely and are to establish principles. Concrete problems are the applied problems and are to give a practical use of the knowledge gained. Teach the unknown through the known.

Introduce new work in its simplest form.

Use illustrations and objects whenever they are needed. Often ask pupils to illustrate their work by drawing.

Note—In fractions. Boy has $\frac{1}{2}$ of a melon and sells or gives away one-half of it. What has he left? Draw instead of working.

Make several applications of the newly learned facts. Use plenty of oral work based on these new facts. Seek for accuracy first, speed second. Check all work for accuracy. Place answers in short division above and not below the dividend.

1. Read and understand what the problem gives and what is required.

2. Plan how to solve it.

3. Solve by shortest way.

4. Test work.

Oral or Drill Work.

1. Oral work is one of the chief factors of arithmetic teaching. It is well to use the first five or ten minutes of each recitation in a quick, snappy, oral direct drill. It should leave no time for thinking.

2. From the 4th grade up, the Studebaker or Courtis Practice Tests should be used.

a. They are well arranged and therefore save the teacher much time in arranging drill materials.

- b. Gives the child a chance to master his particular difficulty.
- c. Standard tests make it possible to measure the efficiency of any given method and they also give the child a chance to measure himself. (See list of tests, page —)
- d. In the Courtis Standard Tests, Series B, in four fundamentals, the 6th grade pupils should attempt 6.7 addition with 58% accuracy; 7.9 subtraction with 73% accuracy; 6.8 multiplication with 70% accuracy; and 5.1 division with 68% accuracy.

3. If not able to obtain the tests many oral drills can be arranged thus: $6 \times 9 - 1 \div 8 \times 7 - 1 \times 12 =$

4. To test work on combinations.

$\begin{array}{c}1\\3\end{array}$	$\begin{array}{c} 10 \\ 3 \end{array}$	(Add from top down)		2 3	
3	3		 -	-	
3	3				

10

Begin with 1 and add 3's till you reach 100. See that child adds by combination and not by counting.

5. Just the same for subtraction. Combinations or separations.

10	7	4	11	8	5	12	9 3	6	3	
3	3	3	3	3	3	3	3	3	3	

Begin with 100 and substract 3 until you reach 1.

6. Take the concrete work for the day and think through the process and estimate answers.

7. Give problems similar to those assigned to the class, only using small numbers.

8. Use statements instead of long drawn out analysis.

9. Checking for accuracy.

a. Give drill in fundamentals.

b. Teaches pupils to depend on self, rather than on answer in the book.

10. Motive. Motive must be provided for the work. The stronger the incentive the greater will be the attention given to the work. Timing is an incentive for speed.

11. Games. One of the best ways of creating a liking for drill. Creates a dissatisfied state of affairs in the mind of the fellow not prepared. Incentive to learn so that he can play the game.

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Fourth Grade, B Class

Read general Suggestions for 4, 5, 6 grades. Review-

All work given in preceding grades.

- a. Work for accuracy and speed in this review.
 b. Let the child know just how he is gaining in accuracy and speed. This is incentive for improvement.

Cond	0.0000	time	on	addition	of	thia	tuno	
openu	some	onne	on	audition	OT	UIIIS	cype.	

6864	661	6864		Note: Ten Method
3678	846	1864		6 + 6 = 12
6486	864	1681	10	Place line for the ten.
	264			2 + 8 = 10
	/ <u></u>	2648	12	Place line for the ten
		6486		1 + 4 + 4 = 9
		8646		Place 9 in answer.
				Two tens to carry to second column.
		0		

Use the ten method, being careful to see that the child really understands it.

Substract	some problems	of this type:	
	864	6486	1646362
	164	1648	2222222

Do NOT require them to read answer of over six digits.

Review all work given in preceding grades. In reviewing multiplication tables work for accuracy and speed. Let the child know just how much he is gaining in speed and accuracy.

1. Teach multiplication by 2 digit multiplier, including multiplication where zero is used:

168

$\times 20$

21360

11. Do NOT use more than 3 members in multiplicand. III. The child should master short division in 4 B. Should be able to place the zero in the quotient.

Stress the idea that digits in answer must be placed directly IV. overdigits in dividend.

XXXX

2)6664

V. Be sure to make clear the use of zero in substraction.

800	180	806	806
166	-160	-166	-160

Teach the dollar sign and the decimal point in dollars and cents. Give examples in dollars and cents in addition, substraction, multiplication and short division.

\$86.40	\$62.24	\$8.24	XX.XX
12.32	-3.14	x9	2)\$86.40

Make these examples vital and practical to child life. Encourage children to bring in their own problems from home and store.

Read and write numbers of 5 and 6 orders.

This can easily be done by playing a game.

Teach children to begin at right and group by 3's thus:

Units Thousand

Then teach names of the groups or families. 000 000 OMIT the use of fractions of UNLIKE denominators.

OMIT the use of fractions with numerators other than ONE.

In 4 B., pupils should be taught to divide squares or circles into one-half, one-fourth, one-third and one-sixteenth. -21--

Fourth Grade, A Class

Oral Drills.

U. S. money. Drill in fundamentals thru bills, playing store or cafeteria. Make change. Pupils make money at home and bring to class. Socialize the recitation. Be sure they know the 1, 2, 5, 10 dollar hills

Note: Place price list on board using local prices. Check multiplication with one digit multipliers, by short division. Good strong review of tables. Use different forms.

679 x 6	$6 \times 1 = 6$ $6 \times 2 = 12$	$6 \div 6 = 1$ $12 \div 2 = 6$		6=1 12=2		6/6= 12/2=	
		had tables, th	01	14-4	6	14/4-	6
					6		6 6
					12		18

Notation and numeration thru two periods. Group in families. Thousand Units

000 000

Roman numerals as needed for chapters of books.

If grouping is properly taught the comma is not necessary. New Work, 4 A.

1. Multiplication by three digit multipliers. Use of naught in multiplier.

$\begin{array}{c} 1264 \\ 112 \end{array}$	$\begin{array}{c} 1264 \\ 102 \end{array}$	864 _60
2528 1264	$\frac{\overline{2418}}{1264}$	51840
1264.		

Study the above forms.

Note: Remember that first digit in product is placed under digit by which you multiply. Do not place naught out at side, thus: 864

Do not multiply by naught, thus:

202 12426 00000 12426

60

6213

2. Long Division. Work intensively. Take short division problems on long division plan and prove, thus: 4316 Steps

2)8632 8	Divide Multiply
$\frac{6}{6}$	Inspect Substract
3 2	Bring Down
$\begin{array}{c} 12\\12\\12\end{array}$	

Teacher, assisted by pupils, should work one on board every day

for at least a week. Answer digits must be placed directly above the dividend digits thus: XXXX

2)6428

First problems should come out even. Divisors such as 11-10-20-30-The smaller the divisor, the larger the quotient should be taught 40. in 4 A.

Steps on board at all times until pupils can travel independently. Stress the inspection step for here is where many fall down.

In bringing down, insist on numbers being in line. Do individual work until trouble is remedied. Do not allow a child to continue working incorrectly.

3. Fractions.

4. Reasoning problems involving multiplication by 2 or 3 place multipliers and two place divisors.

One definite statement instead of long drawn out analysis.

Reasoning problems: 1 hat cost \$6, 14 hats cost $14 \times $6 = 84 . Six chairs cost \$120, one chair cost 1-6 of \$120 or \$120 \div 6.

Most important thing is the correct answer.

5. Applied measurements especially the linear using inches, feet and yards. Making of hair ribbons and fishing lines very interesting. Allow pupils to measure each other, their teacher, and visitors.

Liquid-Selling milk.

Dry-Buying and selling apples, making change.

Parts of time tables.

6. Many problems should be supplied.

7. Test often for mastery of fundamentals.

Terms to learn:

multiplier	measures	dividend	fraction
multiplicand	total of bills	square	halves
product	circle	rectangle	thirds
statement	quotient	triangle	fourths
Reference fo	or measurement w	ork. "Thorndike	Arithmetics."

Fifth Grade, B Class

1. Three digit long division.

Notation and numeration thru three groups. 000

000 000

Emphasize place value of numbers as by groups and by figures within the group. Family of units, thousand, millions, each has units, tens, hundreds.

Teach divisibility of numbers by 2-5-3. II.

Fractions-Reading and writing fractions. III.

Reducing to higher and lower terms, by graphical illustrations. Use construction paper and cut squares into halves, fourths to show 1/2 = 2/4.

The pie or circle is also very good. Be sure the pupil sees this before the abstract work in fractions is done. Much oral drill in 1/2 = 2/4, 4/8 = 1/2, 3-6 = 1-2.

The larger the denominator the smaller the parts, 1/2 compare 1/4. The smaller the denominator the larger the parts, 1/2 compare 1/8.

1. Much drill in changing improper fractions to whole or mixed numbers.

Show pupil that this is one form of division.

88-2 = 44, 81-2 = 401-2. Prove.

Mixed numbers to improper fractions. $6\frac{1}{2} = \frac{13}{2}, \frac{5\frac{1}{2}}{=}\frac{11}{2}$. Prove in fractions just the same as in integers.

Addition and substraction of fractions. Use graphical illustrations, construction paper show 1/2 = 2/4. Then add $\frac{1}{2}$ and 2/4.

This should have plenty of oral drill. Work out a set of combi-

nations for addition of fractions and drill on them. Also separation of fractions for drill.

Find all common denominators by inspection. Make work objective by graphs. Use circle, square, rectangle and lines.

First, add and substract fractions of like denominations. Much oral work. $\frac{1}{2} \div \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$.

Second. Mixed numbers whose fractions have like denominators, use column form. 41/2 61/2 61/2 1/2

Third. Fractions unlike denominators. $\frac{1}{2} + \frac{1}{4}$ $\frac{1}{2} = 2/4$

 $\frac{1}{4} = \frac{1}{4}$

2 62/2

21/2

3/4 Keep fractions simple and denominators small. Use only practical problems.

Teach fractions where borrowing is necessary. Fourth. Subtract integers from mixed numbers 61/2

Mixed	numbers	from	integers	
-------	---------	------	----------	--

Prove all fraction problems. One long division problem a day till accuracy is at least 90%. Test often for accuracy on addition, substraction, multiplication of integers.

Assignment, light, hence plenty of time for socialized problems. Terms and symbols that should be known.

= equal addend + plus sum - minus minuend \times multiply multiplier product ÷ divide fractions subtrahend improper fraction numerator

remainder difference dividend divisor quotient reduction

7 $2\frac{1}{2}$

> common denominator proper fraction similar fraction improper fraction mixed number integer denominator

To be avoided. The idea that pupils have mastered the funda-mentals. G. O. D., Least Common Multiple as a topic and all impractical fractions.

Fifth Grade, A Class

Review.

Reduction-addition and subtraction of fractions. Divisibility of numbers by 2, 5, 3. Find common denominator by inspection. Speed in reduction to lower terms, improper fractions to mixed numbers and mixed numbers to improper fractions.

60/2=30 $60/80 = \frac{3}{4}$

 $7 \frac{1}{2} = 15/2$

Have these mastered before introducing multiplication and division of fractions.

New Work.

Multiplication and division of fractions.

Square measure, finding areas, perimeter. Multiplication of fractions. II.

- 1.
- Fraction by integer, $\frac{1}{2} \times 4 = \frac{4}{2} = 2$. Integer by fraction, $6 \times \frac{1}{2} = \frac{6}{2} = 3$. 2.
- Fraction by fraction $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$. 3.
- Mixed number by fraction $2\frac{1}{2} \times \frac{1}{3} = \frac{5}{2} \times \frac{1}{3} = \frac{5}{6}$. 4.
- Fraction by mixed number $\frac{1}{3} \times 2\frac{1}{2} = \frac{1}{3} \times 5/2 = \frac{5}{6}$. 5.
- Integer by mixed number $4 \times 2\frac{1}{2} = 4 \times 5/2 = 20/2$ or 10. 6.
- Mixed number by integer $2\frac{1}{2} \times 4 = \frac{5}{2} \times 4 = \frac{20}{2}$ or 10. 7.
- Mixed number by mixed number $2\frac{1}{2} \times 2\frac{1}{2} = 5/2 \times 5/2 = 25/2$ or 8.

61/2.

Teach cancellation when needed.

Before beginning division of fractions review long division. Be sure to have the child see that the smaller the divisor the larger the quotient.

ucnu.	203	406	
	8)1624	4)1624	
Then	:		
	$6 \div 6 = 1$	$6 \div 6 = 1$	
	$6 \div 3 = 2$	$6 \div 3 = 2$	
	$6 \div 2 = 3$	$6 \div 2 = 3$	
	$6 \div 1 = 6$	$6 \div 1 = 6$	
	$6 \div \frac{1}{2} = 12$	$6 \div \frac{1}{3} = 18$	
Do a	number of	these then orally:	
	$4 \div \frac{1}{2} =$	$10 \div \frac{1}{2} \equiv$	
	$6 \div \frac{1}{3} =$	$7 \div \frac{1}{3} \equiv$	

Then fractions divided by integer-4/8 divided by 2. Graphs to be used. At all times fractions must be reduced to their lowest terms and not left as 2/8.

Talk divisor so that pupil will know the importance of knowing the divisor, $6 \div 6 = 1$ $6 \div 1 = 6$ $6 \div \frac{1}{2} = 12$ $\frac{1}{2} \div 6 = 1/12.$

Note the difference in result in using same numbers but changing divisors. Fraction by a fraction $\frac{1}{2} \div \frac{1}{2} = \frac{1}{2} \times \frac{2}{1} = \frac{1}{2}$ or 1.

Integer by a mixed number $6 \div 2\frac{1}{2} = 6 \div 5/2$ or $6 \times \frac{2}{5}$ or $2\frac{2}{5}$.

Mixed number by an integer $2\frac{1}{2} \div 3 = 5/3 \times \frac{1}{3}$ or 5/9. Fraction by mixed number $\frac{1}{2} \div 2\frac{1}{2} = \frac{1}{2} \times \frac{2}{3}$ or $\frac{1}{3}$.

Mixed number by mixed number $3\frac{1}{2} \div 2\frac{1}{2} = 7/2 \times \frac{2}{5}$ or 7/5 or $1\frac{2}{5}$.

- 1. Form of analysis.
 - \$3 $\frac{1}{2}$ cost of a hat.

7 number of hats.

6 hats cost $6 \times \$6 = \36 .

2. 1 hat cost \$6.

6 hats cost \$12.

248

2

1 hat cost 1/6 of \$12 or \$2.

What is cost of 7 hats? $7 \times \frac{57}{2} = \frac{49}{2}$ or $\frac{241}{2}$.

Use statement rather than long drawn out analysis.

Making and footing bills an excellent plan for reviewing multiplication fraction. 61/2 lbs. meat at 471/2c a lb.

Applied measurements, use graph.

Linear, square, weight, liquid, U. S. money.

Perimeters of squares, rectangles and triangles.

Technical terms, factor, divisor, common denominator, prime, peri-meter, area, divisibility, composite, bills, debtor, creditor, receipt, foot-ing of bills, area. Teach cancellation.

Omit: Formal analysis, Decimal fractions, Drawing to scale, Cubic measure, all complex fractions.

Sixth Grade, B Class

Review:

1. The work of grade five stress fundamentals of integers, fractions and U. S. money, \$5.00, \$.05, \$.50. Measurements taught in 5 A.

Note: The review not only helps to	fix the principles, taught bu
aids in unifying the arithmetic work,	$62\frac{1}{2}$
2. Finding of area and volumes.	4

2. Finding of area and volumes.

- a. Care in development of tables,
 - Making of cube-large and small 250

b. Tables learned thru application. C.

3. Finding perimeters.

4. Notation, numeration.

5. Bills-teach table of alipuot parts and use in buying and making accounts. -25---

6. Factors.

8

7. Cancellations.

Bring out 1. Multiplying the numerator multiplies the fraction. 2. Multiplying the denominator divides the fraction and the reverse of these.

New Work: Concrete problems involving the use of fundamentals in integers, fractions and U. S. money. These problems must be within the reach of pupils. The socialized problem is best. The concrete problems test the ability to make practical use of facts learned in the abstract.

Decimal Fractions.

Decimal fractions are nothing new, merely old material in a new dress.

1-100 = .011-1000 = .0011-10 = .1

It takes ten of each to make the one higher. Then show this 666.666. Read and write decimal fractions before your class, see that all know where to place the point. Then: $66 \ 1-10 = 66.1$

661-100 = 66.01

661-1000 = 66.001

Then 9-10 + 1-10 = 10-10 = 1. .9 + .1 = 1.0

In addition show that ten of one makes one of the next higher.

Use term decimal fraction and NOT decimal.

Make clear explanation. Show relation to common fractions.

Reading. Writing decimal fractions thru three places: tenths, hundredths, thousandths.

Comparative value: .1 & .01, 1-10 & 1-100

Addition and substraction (three places only.) All rules made after problems have been explained: rule should follow and not precede work. Speed in changing decimal fractions to common and common frac-

tions to decimal fractions.

Checking for accuracy.

New terms:

Ratio	volume	footing
cubic	decimal point	receipts
area	" means inches	equivalent
equation	' means foot	decimal fraction
Such abbrori	ations as ano needed in man	gunomonte

Such abbreviations as are needed in measurements.

Sixth Grade, A Class

Review:

1. Using concrete problems involving fundamentals in integers, common fractions and in adding and subtracting decimal fractions.

2. Buying, selling using aliquot parts.

3. Practical problems including accounts, living expenses and transportation.

4. Stress mental work in this class.

5. Practical measurements, squares, triangles, parallelograms, rectangles, and volumes. 6. Test knowledge of tables thru practical problems and not mere

repeating of tables. Make it necessary for child to know the linear table.

a. Have child make their own rod measure, square foot, square vard.

Be sure they know how the square and cubic tables are de-7. veloped.

Making of 2 in. cube and several 1 in. cubes will help much a. in solving the cubic problem.

New Work:

1. Multiplication and division of decimal fractions, percentage and

interest. Have pupils make all rules governing the pointing of decimal fractions by using common fractions.

a.
$$2/10 \times 2/10 = 4/100 = .04$$
 .2
.2

Make rule, tenths \times tenths makes hundredths.

Make rule, sum up decimal points for product.

6/10 8	6/10 = 12	/10 = 12/10	.6 &	.6 = 1.2.
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.2 + .2 = .4 (make rule) $2/10 \times 2 = 4/10$

 $.2 \times .2 = .04$ (make rule) $2/10 \times 2/10 = 4/100$

.4

Say tenths \times tenths make hundredths and not one decimal place in multiplication and one multiplier makes two places in product.

b. $2/10 \div 2/10 = 1$

This fraction work will not be necessary after it is once understood.

2. Decimal and common fractions as applied to areas, volumes, decimals, and fractions on relation to percentage.

3. Common fractions to be used in developing the mechanics of percentage and loss and gain.

Case 1. 33¹/₃% of 60 ¹/₃ of \$60 is \$20. Case 2. \$20 is what % of \$60? 20/60 are ¹/₃ or 33¹/₃%. Case 3. 3 is 25% of what number? 3 is ¹/₄ of what number? This gives more chance for mental work. More problems can be worked in less time. Fractional method is used in business.

4 Table of equivalent to be made by children, then used.

i. iubic of equivalent	UC NC MANULC NJ	onitidat only one of about
$\frac{1}{2} = .50 = 50\%$	$\frac{3}{5} = .60.$	$7_8 = .87 \frac{1}{2}$
$\frac{1}{3} = .33\frac{1}{3} = 33\frac{1}{3}\%$	4/5 =.80	1/10 = .1
$\frac{2}{3} = .66\frac{2}{3}\frac{6}{2}$	$\frac{1}{6} = .16\frac{2}{3}$	$1/12 = .08\frac{1}{3}$
$\frac{1}{4} = 25\%$	5% =.83 ¹ ∕ ₃	1/20 = .05
$\frac{3}{4} = .75$	$\frac{1}{8} = .12\frac{1}{2}$	1/25 = .04
$\frac{1}{5} = .20 = 20\%$	$\frac{3}{8} = .37\frac{1}{2}$ or .3	75 1/50 = .02
$\frac{2}{5} = .40$	$\frac{5}{8} = .62\frac{1}{2}$ or .6	25
E Mla decima al machhad	abould algo be	ownlained thus:

5. The decimal method should also be explained thus:

¹/₄ of 40=10

 $.25 \times 40 = 10.00$ (say 25 hundredths times 40)

Such as 9%, 7% must be worked by decimal form: 864

.09

6. Interest is merely introduced. Stress should be placed on difference on time between dates and on relation of interest to decimal fraction work. "Teach the new through the old."

6% interest as .06 of the sum. 6 hundredths \times 864.

New Terms:

Interest Equivalent per cent Volume Angle

Seventh Grade, B Class

In the first six grades the pupil has completed the arithmetic of ordinary computation; has learned how to use the common tables of measures and how to find a given percent of a number.

In the first half of the seventh grade a study is made of the most important application of arithmetic-those which relate to home, the store, the farm, the most common industries and the bank.

In taking up these applications of arithmetic a review is made of the operations with numbers; particular attention is paid to short cuts in computation. The important subject of percentage which enters into every kind of business is reviewed and treated from the beginning.

- I. The Arithmetic of The Home.
 - Cash accounts, household accounts, the need for knowing (a) about percents.
 - (1)Finding percents.
 - (a) Percents and common fractions.
 - (b) Percents as decimal fractions.
 - (c) Decimal fractions as percents.
 - (b) Home Problems.
 - (1)Reading the Gas Meter, Electric Meter.
 - (2) Problems of percentage.
 - (3) Expense Accounts.
 - Household Economics. (c)
 - Heating the House. (1)
 - (2)The Family Budget.
- II. Arithmetic of the Store.
 - Oral Subtraction. (a)
 - (1) Making change.
 - (b) Oral Multiplication.
 - (1) Short cuts in multiplication.
 - (c)Use of Aliquot parts in Multiplication.
 - Cash Checks-discounts, list price, net price, cost discount, (d) trade discount.
 - (e) Bills-receipted bills, invoice.
- III. Arithmetic of the Farm.
 - (a) Cost of wastefulness.
 - (b) Farm accounts.
 - (c) Farm records.
 - (d) Problems of the dairy.
 - (e) Farm income.
- (f) Soils, crops, good roads. IV.
 - Arithmetic of the Bank. (a) Savings Banks.

 - (b) Bank account essentials.
 - Interest. (c)
 - (d) Postal Savings Bank.
 - (e) Bank of Deposit.
 - (1) Deposit slip.
 (2) Check book.
 - (f)Promissory note.
 - (g) Bank discount.
 - (h)
 - Commercial paper. Six Percent Method. (i)

Seventh Grade, A Class

The work of 7 A consists of intuitional observational and constructive geometery paralleled with related work in arithmetic, mensuration, ratio and proportion, practical measurements, etc. The geometry adapted to this grade is geometery of form, size and position.

- T Geometry of Form.
 - Geometric figures. (a)
 - (1)Square, triangle, circle, arc and cubs.
 - (b) Simple construction work.
 - Construction of triangles, perpendiculars; bisecting a line; (c) bisecting an angle; parallel lines; dividing a line.
 - (d) Geometric patterns.
 - (e) Drawing to scale.
 - (f) Similar figures and symmetry.
 - The pantograph. (1)
 - (2)Plane figures formed by curves.

- (3) Solids bounded by curves.
- Outdoor work. (g)
- II. Geometry of Size.
 - Practical measurements of length. (a)
 - (1)Outdoor work.
 - Estimates of areas. (b)
 - (1) Area of a rectangle, parallelogram, triangle, trapezoid.
 - Ratio and proportion applied to similar figures and propor-(c) tional lines. Outdoor work.
 - (d) Study of the circle.
 - Area of circle; circumference, diameter, and radius. (1)
 - (e) Study of volumes.
 - (1)Volume of a rectangular solid.
 - (2)Volume of a cylinder.
 - (f) Metric measure.
 - (1) Length, weight, capacity.

Geometry of Position. III.

- (a) Fixing positions.
 - (1)Positions on Maps.
 - (2)Map drawing and location.
- (b) Locating Points.
 - (1)Points equidistant from two points.
 - Distance of a point from a line. Position fixed by two lines. (2)
 - (3)
 - Problems in locating points. (4)
- Use of angles to determine position. (c) (1) Drawing angles of various degrees.
- IV. Supplementary Work.
 - (a) Square Root.
 - Volume of a Prism. (b)
 - Lateral Surfaces and Volumes. (c)
 - Volume of a Sphere, Cone. (d)

Eighth Grade, B Class

Algebra furnishes the material for the first half of the year, the second half being devoted to those topics of business arithmetic which are appropriate to the student's maturity.

The use of the formula in algebra has already been shown in the seventh grade. The work in algebra is such as every boy and girl should become familiar with; the formula is needed in reading books and articles of various kinds. The graph is used in many lines of business and study, and the negative number is commonly used.

- I. The Formula.
 - (a) Abbreviations and symbols.
 - Simplifying. (b)
 - Evaluating formulas. (c)
 - Formulas used in shops, business and the home. (d)
- The Equation. II.
 - (a) Unknown quantity.
 - Equations requiring addition, subtraction, multiplication and (b) division.
 - (a) Unknown quantity.
- III. The Graph.
 - (a) Value of Graph.
 - Use of Graph. (b)
 - Pictogram. (1)
 - (2) Squared paper.
 - (c) Kinds of graphs.
 - (1)Interest graph.
 - (2)Wage graph.
 - (3)Curves as graphs.

- (4) Temperature graph.
- IV. Negative Numbers.
 - (a) Need for negative numbers.
 - (b) Addition, subtraction, multiplication and division of negative numbers.
 - V. Algebraic Operations.
 - (a) Addition, subtraction, multiplication and division.
- VI. Further Use of Algebra.
 - (a) Simple machines.
 - (b) Problems in business.

Eighth Grade, A Class

- I. The Arithmetic of Trade.
 - (a) Ordering goods.
 - (b) Invoice and bills.
 - (c) Accounts.
 - (d) Profit and Loss.
 - (e) Commercial discount.
 - (f) Short Methods and Aliquot parts.
 - (g) Foreign Money.
 - (h) Metric System.
- II. The Arithmetic of Transportation.
 - (a) Passenger rates.
 - (b) Freight rates.
 - (c) Express rates.
 - (d) Parcel Post.
- III. The Arithmetic of Industry and Building.
- IV. The Arithmetic of Banking.
 - (a) Depositing and drawing money.
 - (1) Use of Bank Book, deposit slip, check.
 - (b) Borrowing from a bank.
 - V. Arithmetic of Corporations.
 - (a) Stocks and Bonds.
 - (1) Common and preferred stock.
 - (2) Registered and coupon bonds.
 - (b) Mortgage.
 - (c) Profit sharing.
 - (d) Workmen's sharing.
- VI. Arithmetic of Community Life.
 - (a) Insurance.
 - (1) Property.
 - (2) Accident.
 - (3) Personal.
 - (b) Building and Loan Associations.
- VII. Arithmetic of Civic Life.
 - (a) Expenses of Government.
 - (b) Taxes.
 - (1) Local, state, national.
 - (2) Illustrations of each.

Suggestive Text Books

Alexander-Dewey Arithmetic	Longmans' Green &	& Co.
Elementary Book.		
Intermediate Book.		
Advanced Book.		
The Anderson Arithmetic	Silver-Burdett &	Z Co.
Book I		
Book II		
The Thorndike Arithmetics	Rand-McNall	y Co.
Book I		
Book II		
Book III		

Hamilton's Essentials of Arithmetic......American Book Co. Three Book Series. Everyday Arithmetic—Hoyt & Peet.....Houghton-Mifflin Co. Book I Book II Ginn & Company Book I Book II Book III Junior High School Mathematics.....John C. Stone Sanborn & Company Book I Book II Book III Holt Book I Book II Book III Scribners Book I

Book II Book III

Arithmetic Tests

Courtis Standard Research Tests in Arithmetic, series B. S. A. Courtis, 82 Eliot Street, Detroit, Mich. Courtis-Cleveland Arithmetic Tests. Cleveland Survey Tests. Monroe-Diagnostic Tests in Arithmetic. Bureau of Educational Re-

search, Urbana, Illinois.

Peet and Dearborn-Progress Tests in Arithmetic. Houghton, Mifflin Company.

Woody-Arithmetic Tests.

Bibliography

Bonser, F. G., "The Elementary School Curriculum." Chapter XI. Macmillan Company.

Brown and Coffman, "How to Teach Arithmetic." Rowe Peterson Company.

Charters, W. W., "Teaching the Common Branches." Chapter XII.

Freeman, F. N., "Psychology of the Common Branches." Chapter IX. Houghton, Mifflin Company.

Klapper, Paul, "The Teaching of Arithmetic." D. Appleton Company.

Kendal and Mirick, "How to Teach the Fundamental Subjects." Chapter III. Houghton, Mifflin Company.

Jessup and Coffman, "The Supervision of Arithmetic." Macmillan Company.

Smith, David Eugene, "The Teaching of Arithmetic." Ginn & Company.

Stone, "The Teaching of Arithmetic."

Suzzalo, Henry, "The Teaching of Primary Arithmetic." Houghton, Mifflin Company.

Wilson, H. B. & G. M., "The Motivation of School Work." Chapter Houghton, Mifflin Company. Thorndike, Ed., "The New Methods in Arithmetic." Rand-McNally IX.

Company.

This course is intended for general guidance in the consideration of fundamental art principles and their relation to various subjects of the school curriculum. It affords opportunity for development of the three divisions of art training; representation, design and industrial art. The purposes underlying the course are conceived to be as follows: To promote originality; to fix habits of accuracy, neatness and order in the use of simple materials; to cultivate appreciation of good form, design and color in dress in the home and in the community. Methods of proceedure and subject matter vary to meet conditions presented by projects and problems in the life of the child. A graphic vocabulary of symbolic forms for illustrative purposes is developed through observation and imitation.

First Grade

I. Representation.

> Figure: Stick symbols of boy, girl, man, woman. Drill for skill in expressing action. Clothe the figures to represent familiar characters.

> Animals: Rabbit, duck, chicken, mouse, goose, tortoise, bear, squirrel, fish, toad.

Birds: ...Sparrow, crow, robin, jay.

Nature: Fruits, vegetables, grasses, flowers, leaves, trees.

Shelters: Rabbit hutch, chicken coop, dog house, barn, garage, bird house, igloo, wigwam.

Illustration of Stories, school and home activities.

Objects: Tools, utensils, furniture, toys.

Mediums: Tearing, cutting, crayons, paints.

II. Color.

Names of standard hues. Color recognition through observation of things in the environment. Color games.

III. Design.

IV.

Repetition, alternation and rhythmic grouping of units. Problems in simple balance applied to blotters, booklets, baskets and other construction problems.

Mediums: Crayon strokes, brush spots, paper units, seeds, leaves. Construction.

Folding: Seed box, envelope, cart, cradle, houses, pin wheel, boat problems for special days, furniture, house.

Introduce inch measurement.

Booklets: Color booklet, animal cutouts, nature, picture cutouts. Table Problems: Subjects suggested by school interests of the children as stories, Indian life, occupations, doll's house. Textiles: Stick printing for decoration of textiles in the doll's house. Costumes for dolls. Weaving of rugs, holders, and mats

in connection with the study of cotton. Stitching applied to simple problems.

Clay Modeling: Rabbit, bear, squirrel, pig, hen, cow, tortoise, dishes, tools, utensils, fruit and vegetables.

Second Grade

Representation. I.

Review graphic forms learned in the previous grade and develop new ideas needed in illustration of stories and reading lessons.

Figure: Stick figure in relation to study of home and school activities. Dutch boy and girl, Indian, Arab.

Animals: Study animals in varied positions. Elephant, lion,

*This outline prepared by Miss Grace M. Baker, Professor of Fine and Applied Arts, Colorado State Teachers College.

turkey, sheep, camel, ox, fox, rabbit, donkey, goat, horse, circus animals.

Birds: Meadow lark, warbler, cat bird, woodpecker.

Nature: Fruits, vegetables, flowers, seed pods, grasses, leaves, trees.

Shelter: Indian wigwam, Arab tent, Dutch house, Cinderella's house, trees.

Objects: Toys, tools and utensils used by Indians and Arabians and in home occupations.

II. Color: Review color names and combine colors to produce secondary group. Compare colors in nature, recognizing light and dark of standard hues.

III. Design.

Arrangements of dark and light masses to develop feeling for balance.

Subjects: Fairy pictures of trees, and castles, birds and butterflies with flowers, booklet covers.

Arrangement of colored paper units to form borders and surface patterns involving repetition, alternation and rhythmic grouping. Interpretation and application of Indian design. Lettering.

IV. Construction.

Paper Problems: Furniture, envelopes, houses, barn, garage, box, boat, May basket, gifts, toys, special day problems, measuring to the inch and half inch.

Booklets: Color booklet based upon nature study.

Illustration Unit from literature. Jishib, Hiawatha, Arabian Life. Birds, Animals.

Table Problems: Arabian life, Hiawatha, Jishib, circus.

Textiles: Weaving: Blanket, rug, head band, mat, dolls, toboggan, hammock.

Stitchery: Simple designs applied in decorative color to burlap, mats, moccasins, books, bags. Costumes for dramatizations.

Clay: Animal forms, beads, and utensils suggested by the study of Arabs and Indians.

Third Grade

I. Representation.

Figure: Development of figure and costume of nationalities and characters suggested by other subjects in the curriculum. Activities of Indians and early settlers of Colorado, activities of people in the industries of our state. Animals: Beaver, bear, fox, squirrel, domestic animals and fowls,

Animals: Beaver, bear, fox, squirrel, domestic animals and fowls, insects. Development of more complex form and action than is attempted by previous grades.

Birds: Oriole, black bird, tauager, flicker, jay.

Nature: Fruits, vegetables, plants and flowers in connection with nature study.

Shelter: Home and public buildings. Homes of early explorers of Colorado.

Objects: Vehicles of transportation, tools and utensils suggested by home occupations and local industries.

Illustration: Indian life, life of early settlers and explorers in Colorado, means of travel, incidents suggested in reading, history and geography.

II. Color.

Recognition of light and dark values of standard hues. Observe color in nature and contrast values. Work for appreciation of refined color combinations. Make a color booklet.

III. Design.

On cross section paper develop units of design subjects such as

-33--

seeds, leaves, fruit, flowers, birds, animals. Study Indian motifs and the interpretation of Indian design.

Work for feeling of balance rhythm and good spacing in the decoration of construction problems.

Lettering, posters.

IV. Construction.

Paper and cardboard problems involving measuring to the quarter inch, scoring, dotted line, full line, mitering. Suggestions—en-velopes, candy box, May basket, telephone pad, calendar, pen wiper, jointed toys. Introduce the circle marker. Begin use of coping saw on compo board toys.

Fourth Grade

I. Representation.

Figure: Characters suggested by the literature of the grade-Greek heroes, giant, brownie, Pilgrim, Indian, Pinocchio, Japanese. Activities of children in occupation, and sports.

Animals: Horse, grizzly bear, mountain sheep, chipmunk, dog, wolf.

Birds: Humming bird, eagle, magpie, house finch, blue jay, grosbeak, mountain jay.

Nature: ...Sprays, flowers, berries, seed pods, and trees as a basis

for design and color. Shelter: Spanish missions, homes of Indian and early explorers. Objects: Subjects suggested by the study of industries of Colorado suc has farm products, furniture, wooden utensils, vehicles of transportation and conveyance.

II. Color.

> Observe color in nature and record three values of each spectral hue in nature drawing. Learn intermediate hues and begin the study of opposites. Strive for increased appreciation of color.

III. Design.

> Development of design principles in the application of units to a given space. Decoration of a circle and a square for construction problems. Cultivate feeling for balance, rhythm and harmony in spacing.

Motifs: Nature, insects, birds, animals. Lettering, posters.

IV. Construction.

Paper and cardboard construction involving measuring, scoring, mitering, pasting. Problems-telephone and list pads, calendars, booklets.

Problems for the coping saw-Toys, vehicles and machines suggested through the study of industries.

Table Problems:

Industries studied in geography, history stories, life of fur traders and explorers, Spanish missions, Pilgrim life.

Textiles: Study costumes for school, street and social func-tions. Make costumes for small figure of Dutch children, Japanese Twins, Pinocchio.

Weaving: Marble bag, hat band, raffia basket, Indian blanket or rug.

Clay: Tile, paper weight, ink well, bulb bowl. Model figures and animals suggested by various subjects of the curriculum.

Fifth Grade

Representation. I.

Object Drawing: Symbolic forms to be used in illustration of industrial and commercial geography of North America. **Problems:**

-34--

- 1. Vehicles of transportation-wagons, automobiles, trains, ships, airplanes.
 - Tools, utensils, machinery.

Illustration of rhymes and riddles which suggest objects involving cylindrical and elliptical shapes. Old King Cole, Polly Put the Kettle On.

Explain meaning of Ellipse, eye level, center of vision. Effect of distance and position upon apparent size and shape of objects.

Nature: Drawing and painting of familiar garden products and nature sprays for purpose of securing color notes and motifs for design. Emphasize need for close observation by comparison of finished products with study. Vegetation characteristic of climatic regions of United States. Subjects suggested by Geography.

Animals: The horse developed from study of various incidents depicted in stories of King Arthur and Joan of Arc. Use drawings for construction of problem in compo-board. Squirrels and other fur hearing animals Correlate with reading material.

fur-bearing animals. Correlate with reading material. Animals suggested by study of commerce and industry of North America-Burrows, mules, Eskimo dogs, cattle, sheep, poultry.

Birds: Bluebird, heron, kingfisher, killdeer and other Colorado birds possessing widely differing characteristics.

Figure: Proportion and form of the human figure. Develop symbolic figure to be used as basis for ilustrative drawing and costume design. Draw the figure in action.

Costume: Clothe symbolic figure to represent historical characers—Columbus; Spanish, French and Dutch explorers; Revolutionary soldier; Indian. This may be done through the mediums of drawing, painting or paper cutting.

Illustration: Subjects suggested by history:.. Voyage of Columbus and discovery of America, events in the life Lincoln, the uses of steam.

Subjects from reading: Illustrate events and incidents from the following stories: King Arthur, Joan of Arc, Little Lame Prince, The Bluebird.

II. Color.

Use problems in illustration, nature drawing, costume and design as means of developing the following color study: Definition of the terms, hue, value, intensity, monochromatic, analogoús, complementary. Hues and values of gray. Use of light, middle and dark values of color. Recognition and use of complementary color schemes.

III. Design.

Decoration of Construction Problem.

Develop flowers, bird, and animal motifs on cross section paper for border and surface patterns. Aim to increase the appreciation of good spacing in dark and light.

Lettering: Practice in freehand lettering applied to mechanical drawing problems. Study a good style of simple poster letters. Develop on cross section paper.

Mechanical Drawing: Make working drawings of construction problems.

IV. Construction.

Paper and Cardboard Construction: Portfolios and envelopes of convenient size for preservation of school work. Construction of booklets involving principles of elementary bookbinding.

SPECIAL DAY PROJECTS.

Table Problems: Supplement work in geography, history and reading. Show geographical characteristics of climatic regions of North America, voyage of Columbus, and discovery of America, subjects from stories of Joan of Arc, Little Lame Prince, King

Arthur, The Bluebird.

Compoboard Toys: Mechanical horse developed from study of Joan of Arc, and King Arthur. Burrow, rooster (see animal study).

Clay Modeling: Clay modeling for construction of sand-table figures and for form study.

Sixth Grade

1. Representation.

Object Drawing: Review perspective of circle in drawing of Greek vases. Develop parallel perspective through study of roads and streams; Greek and Roman interiors.

Nature: Detailed drawing of flowers, fruit and plants in various stages of development with color notes for suggestion in design.

Animal: Animals of South America and Europe-Elephant, monkey, alligator, llama, alpaca.

Birds: South American birds of brilliant plumage.

Figure: Stress the study of proportion and action of the figure. Draw from pose and use drawings as basis for illustration and costume design.

Costume: Customs of dress in European countries. Represent by means of drawing, painting or paper cutting. Greek simplicity of line and decoration applied to present day costume.

Illustration: Industries and life habits of people in different European countries: Holland—dairying. France—silk industry. Italy—fruit industry.

II. Color.

Color study developed through nature drawing, costume, illustration and design. Review points covered in first grade. Study analogous and complementary harmonies.

III. Design.

Decoration of Construction Problem: Give practice in the selection of ideas symbolic of a given subject and in expression of design suitable for a given purpose. Emphasize good spacing of dark and light. Use geometric and nature motif. Cut motifs from paper and apply to block print or stencil problem. Basket design developed from Greek symbolism.

Lettering: Free hand lettering used in connection with mechanical drawing problems. Poster lettering.

Posters: Design posters for school advertisement.

IV. Construction.

Paper and Cardboard Construction: Portfolios, booklets for school work, simple bookbinding process, special day projects.

Table Problems: Subjects from Greek and Roman history, physical characteristics and life of people in various countries in South America and Europe, adventures of Ulysses.

Compoboard Toys: Venetian galley, jointed Greek warrior.

Clay Modeling: Study and practice methods of pottery making. Emphasize characteristics of Greek vase forms.

Seventh Grade

I. Representation.

Object Drawing: Composition of beautiful shapes, of still life and nature objects forming groups which have unity of spacing and value. Review parallel perspective. Develop two point perspective through the study of interior decoration.

Nature: Value study applied to flowers, fruit, vegetables, seeds. Interpretation of color value. Local trees, trees characteristic of various countries studied in geography, trees for decorative landscape.

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Animals: Animals of Africa, Asia, and Australia. Drawings serve as a basis for development of wooden toys—Elephant, giraffe, kangaroo, monkey.

Birds: Decorative composition from birds of Africa, Asia and Australia.

Figure: Figures used in costume design.

Costume: Development of costume through English and Early American history as background for study of present day costume. Use nature color notes in planning dress suitable for various occasions.

Illustration: Activities characteristic of various social classes of Europe. Progress of early explorations in America. Stages in settlement and growth of different colonies. Homes, dress, occupations.

II. Color.

Application of good color arrangement to problems in costume design and interior decoration.

III. Design.

Appreciation of the application of design principles to all space arrangements as well as to decoration. Decorative arrangement of interiors. Expression of design principles in landscape composition and still life groups.

Distinguish between symmetrical and occult balance. Make use of both types. Translation of designs into patterns suitable for application to different mediums such as weaving, cross stitch, bead weaving.

Lettering: Rapid, freehand lettering using both capital and lower case letters. Poster letters of varied proportions. Extension and compression of letters to fit given spaces.

Posters: Design posters for school advertisement.

IV. Construction.

Paper and cardboard construction: Portfolios, elementary bookbinding.

Booklet of period furniture arranged chronologically as an outgrowth of English history study.

Compoboard Toys: Mechanical birds and animals.

Clay Modeling: Pottery for the home. Candlesticks, inkstand, tiles, bulb bowl, paper weight.

Textiles: Black print design applied to scarf, pillow top, drapery · or other problem for home decoration.

Eighth Grade

I. Representation.

Object Drawing: Review perspective of circle, one and two point perspective. Three point perspective presented through illustration of poem, "A House by the Side of the Road."

Objects used for interior decoration.

Nature: Detail drawing from plants to be used as a source of design. Value study of trees and plants in decorative composition.

Animals and Birds: Translation of familiar animal and bird forms into composition and decorative design.

II. Color.

Application to costume, interior decoration and design. Ways of combining color for brilliant and quiet harmonies.

III. Design.

Design for Construction Problems: Designs derived from flowers, bird and animal motifs used for decoration of construction problems. Study principles of radiation and measure.

Posters: Posters for school and community advertisement. Emphasize civic betterment.

Lettering: Rapid freehand lettering used on working drawings,

cards, programs and booklets. Varied styles of poster lettering. Decorative initial letters.

Figure: Study figure for use in illustration, costume, design and posters.

Costume: Study costumes of the Civil War period and compare with costumes of present day. Consider the suitability of style, color and material of costumes for different types of people.

Illustration: Correlate with work in English, history, and geography and social science. Illustrations to be used as basis for poster design.

Mechanical Drawing: Working drawings for construction problems.

IV. Construction.

Paper and Cardboard Construction: Portfolios, special day projects, elementary bookbinding.

Table Problems: Correlate with study of socral science by working out suggestions for community betterment. A model city street, a model farm, garden plans.

Compoboard Toys: Mechanical toys to represent characters contributing to civic improvement enterprises, street sweeper, policeman, fireman.

Clay Modeling: Pottery for the home. Modeling of figure and animals.

Textile: Block print or stencil design applied to textile and combined with stitchery.

Bibliography

Bonser, F. G., The Elementary School Curriculum, Ch. IX and XIV, Macmillan Company.

Dobbs, Ella, Illustrative Handwork, Macmillan Company.

Dobbs, Ella, Primary Handwork, Macmillan Company.

Sargent & Miller, How Children Learn to Draw, Sargent & Miller, Ginn & Company.

Sargent, W., Fine and Industrial Arts in Elementary Schools, Ginn & Company.

Snow & Froelich, Industrial Art Text Books, Peary Company.

English and Literature The Reading of Literature *

Literature may not with profit be rigidly graded for children's reading. The suitability of any classic to meet a need in a child's experience is determined by many widely varying conditions. The following outline therefore must not be regarded as fixed and unchanging. It is offered rather as suggestion of the range of resource from which much of the literature studied in the Training School is selected. Moreover, it is by no means comprehensive. The teacher of the young, alert to every opportunity of inspiring each pupil to new contacts in the world of books, is constantly breaking through and transcending whatever program other teachers with other classes may have determined. A general plan is essential to the end of economy and unity; but the wise teacher knows when to use it as a point of departure.

Again, there has been no attempt in the outline to offer a consistent plan of correlation. *No hard-and-fast logic of sequence or of association may profitably be followed, in formative periods of literary appreciation; hence there is avoidance of insistence upon any scheme which might at times be artificial. Especially has the difficulty of offering an adequate basis of sequence in the primary grades been felt. Since the opportuness of presentation of a literary unit to little children depends upon constantly varying factors, any plan of grouping in outline form is apt to be misleading. Therefore merely a list of available material is presented in form of basic and supplementary readers and compilations of verse and story.

The outlines for the upper grades hint here and there at types of correlation found of value in vivifying and enriching literature. In no instance has any study been made inclusive of all suitable material which the resourceful teacher should have at her command. Moreover, many units or cycles herein offered singly are actually presented to the children in connection with many other units related in theme and spirit. It is hoped that the occasional tentative groupings suggested will point the teacher to many studies of similar type.

In many years of experimentation, we have realized satisfactory results from the plan of enriching, with a mass of related material, a few great cycles as a central core. For example, any fifth or sixth grade teacher should be able, with the King Arthur tales as a center, to interest her group in themes of chivalry and heroism embodied in many tales and poems. Such a study has proved of greater value than the consecutive use of a reading-book containing unrelated classics. Our use of school readers, indeed, after the children have mastered the tools of reading, is for the most part rather supplementary than basic.

The tentative grading herein suggested is determined in part by the content of other courses, such as history, geography and nature study. Lack of space forbids amplification here, but a study of the curriculum will reveal more or less significant connections.

Moreover, it is not herein fully indicated whether certain units listed are used for intensive study, for supplementary class reading—prepared or sight reading, for reading aloud by the teacher, for dramatization, or for individual reading, silent or oral. It is obvious that these matters must be as flexible as the grading. However, a few general principles serve as guide in determining them.

(a) Literature, an art inseparable in its origin from living speech, must be presented in large measure in oral form by the teacher until the pupil is able to draw for himself from the sources which are his birth-

*The literature for the first five grades has been organized and classified by Miss Frances Tobey, Professor of Oral English. The Literature for the sixth, seventh and eighth grades has been organized and classified by Miss Bernice Orndorff, Training Teacher of English, Colorado State Teachers College.

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right. Even in the upper grades, the teacher should occasionally make her contribution in the social situation which alone affords an adequate reason for oral reading in any class.

(b) In order that emphasis may be put from the beginning upon reading as thought-getting, and the pupil established early in habits of growingly wide and rapid reading, many easy arrangements of simple folk and literary material should be read even in the first year; and oral reading should be only one of various types of motor reaction to the printed page.

(c) Since every practice must be tested in the light of its service in the formation of a reading habit at once accurate, appreciative, and rapid, care must be taken that increasingly extensive silent reading be stimulated, throughout the grades, by many motivations: in the light of the entire curriculum, of local and world affairs, of analogies and contrasts of theme and treatment, of group interests, of individual interests. (d) It follows that wide variation of individual range of reading is

inevitable, even desirable.

(e) Oral reading, to the ends of fuller appreciation of literary values, more nearly complete identification with the human experience reflected in the literature read, and the development of personality through luminous expression, has its place throughout the grades. But its declared ends should be social, never formal; it should comprise only a relatively small part of the child's reading; it should concern itself only with pure literature; it should illuminate such literature by reflecting its emotional, imaginative, and artistic values.

Kindergarten

- NURSERY RHYMES-Around the Green Gravel, Baa, Baa, POEMS: Black Sheep, Bye Baby Bunting, Cock-a-doodle Doo, Daffy Down Dilly, Hey Diddle Diddle, Hickory Dickory Dock, Humpty Dumpty, If All the Seas Were One Sea, I had a Little Nut Tree, I Love Six-Jack Spratt, Little Bo-Peep, Little Boy Blue, I Saw Three Ships Jack Spratt, Little Bo-Peep, Little Boy Blue, I Saw Three Ships Come Sailing By, Little Jack Horner, Little Miss Muffet, Mistress Mary, Old King Cole, One Misty, Musty Morning, Queen of Hearts. See, Saw, Marjorie Daw, Sing a Song of Sixpence, The Cocks on the Housetop, The Man in the Wilderness Asked Me, The North Wind Doth Blow, There Was a Crooked Man, There Was a Little Guinea Pig, There Was an Old Woman Tossed Up in a Basket, There Was an Old Woman Who Lived in a Shoe, The Wind Must Blow Three Little Kittens, Wee Willie Winkie, Winter Has Come; CHRISTINA ROSSETTI—A City Mouse Lives in a House, At the Seaside, Boats Sail on the River, Brown and Furry, Horses of the Sea, Hurt No Living Thing, If All Were Rain and Never Sun, Mix a Pancake, On the Grassy Bank. The Peach Tree on the Southern a Pancake, On the Grassy Bank, The Peach Tree on the Southern Wall, What is Pink, Wrens and Robins in the Hedge; JANE TAY-Wall, What is Pink, Wrens and Robins in the Hedge; JANE TAY-LOR—I Like Little Pussy, Pretty Cow; POULSSON—Baby's Breakfast, Welcome to Spring; WORDSWORTH—March; PAL-GRAVE—Little Child's Hymn; ALLINGHAM—Swing Song; STE-VENSON—My Bed is a Boat, Rain, Singing, The Swing, Time to Rise, The Cow; LEAR—The Nonsense Alphabet; ALMA TADEMA. —The Robin; DASKAM—The Sleepy Song; WADSWORTH—Over in the Meadow; DUFFENBACK—The Mouse's House; LORD HOUGHTON — Lady Moon; BIRD — Fairy Folk; FOLK LORE READER, Book I—When We Have Tea; UNKNOWN—How They Sleep. The Fairy. The World's Music, Two Little Kittens. Sleep, The Fairy, The World's Music, Two Little Kittens. STORIES: The Three Bears, The Three Pigs, Little Red Riding Hood,
- The Gingerbread Boy, Chicken Little; All About Johnnie Jones, (Caroline Verhoeff); Boston Collection of Kindergarten Stories; The Story Hour.
- PICTURE BOOKS: DUTTON-Book of Ships; BROOKS- Johnny Crow's Garden; BURGESS-Goops; CALDECAT-Picture Book;

FRANCES—Book of Cheerful Cats; LANE—Beauty and the Beast; WEATHERLY—Book of Games; GREENAWAY—An Apple Pie, Under the Windows, Mother Goose; VOLLAND—Mother Goose; JESSIE WILCOX SMITH—Mother Goose.

First Grade

The following text books offer a wide range of simple verse and folk tale in suitable form: Riverside Primer and First Reader. Van Sickle, Seegmiller and Jenkins (H. M.)

(Π. MI.)
Reading—Literature Primer and
First Reader Edson-Lang (S. & Co.)
Reader
Primary School Reader-Book One. Elson (S. F. & Co.)
The Progressive Road to Reading-Kleiser, Ettinger and Shimer
Story Steps (S. B. & Co.)
The Easy Road to Reading-Primer. Smith (L. & C.)
The Winston Readers-PrimerFirman and Maltby (J. W. Co.)
Literary Readers-Book One
Studies in Reading—Primer and
First Grade Searson and Martin (Univ. Pub. Co.)
First GradeSearson and Martin (Univ. Pub. Co.) Story Hour Readers—Primer and
Second Book
Summers Readers — First
McKloskey Primer
Beacon First and Second ReaderFassett (G. & Co.)
Horace Mann First Reader
Aldine Primer and First ReaderBryce and Spaulding (N. & Co.)
Beginner's Series First Reader(H. M.)
Dramatic First Reader
Red Riding-Hood and the Seven Kids
Action, Imitation and Fun SeriesPratt-Chadwick (Ed. Pub. Co.)
Bow-Wow and Mew-Mew-Pratt-Chadwick (Ed. Pub. Co.)
Sunbonnet Babies' PrimerGrover (R. Mc.)
Overall Boys' PrimerGrover (R. Mc.)
Hiawatha Primer
Storyland in PlaySkinner (R. Mc.)
Storytand in FlaySkinder (10. 110.)

FURTHER POETRY SOURCES

Child's Garden of VersesStevenson Songs of InnocenceBlake Songs of Tree Top and Meadow McMurry (Pub. Sch.) Child's Book of VersesManchester
Songs of Tree Top and Meadow McMurry (Pub. Sch.)
Songs of Tree Top and Meadow McMurry (Pub. Sch.)
Little Rhymes for Little ReadersSeegmiller (R. Mc.)
Graded Poetry-Book OneAlexander-Blake (Mer. & Co.)
For the Children's HourBailey and Lewis (Brad.)
Classic Stories McMurry (Pub. Sch.)
Classic StoriesMcMurry (Pub. Sch.) Stories to Tell to ChildrenBryant (H. M.)
How to Tell Stories to Children Bryant (H. M.)
Firelight Stories
Nature Study and Literature McGovern (Flan.)
The Golden Windows Richards (L. B. & Co.)
Stories and Story-Telling Keves (Ap. & Co.)
The Story of Ab Waterloo (D. P. & Co.)
Nature Myths
Tiny Hare and His Friends
Half a Hundred Stories
Uncle Remus Harris
Fairy Tales Grimm Brothers
Fairy TalesGrimm Brothers Tales of LaughterWiggins and Smith (G. & D.)

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Why the Chimes Rang......Alden (B. M.) Good Stories for Great Holidays...... Olcott (H. M.) Aesop's Fables In the Child World.....Poulsson (Brad.) Fairy Tales Every Child Should Know Stories Children Need......Bailey (Brad.) Child Life......Blaisdell (Mac.) Around the World in Myth and Song Holbrook (H. M.) Judd (R. Mc.) Classic Myths Story Teller's Magazine.....

- EXAMPLES OF POETRY TAUGHT: MOTHER GOOSE—Peter Piper, Old King Cole, Five Little Pigs, The North Wind Doth Blow, Blow Wind Blow, Rain, Rain, Go Away; ROBERT LOUIS STEVENSON Autumn Fires, The Wind, Windy Nights, The Rain is Raining All Around, Where Go the Boats, My Shadow, Foreign Children, Bed in Summer, The Sun's Travels, the Moon; CHRISTINA ROSSETTI— O Wind, Where Have You Been, Dancing on the Hill-tops; JANE TAYLOR—Twinkle, Twinkle, Little Star; TENNYSON—Sweet and Low, Minnie and Winnie, The Bee and the Flower; EUGENE FIELD —Seein' Things, Wynken, Blynken, and Nod, The Night Wind, The Duel, The Rock-a-Bye Lady; GEORGE MACDONALD—Where Did You Come From, Baby Dear; ELIZABETH PRENTISS—Sleep, Baby, Sleep; CLARA BATES—Who Likes the Rain; POULSSON— The Sunbeams; COOPER—Come, Little Leaves; MACK—Little Ducks; WILLIAM BLAKE—The Lamb; VAN DYKE—"This is the Carol the Robin Sings;" CHILD—Thanksgiving Day; UNKNOWN —Grasshopper Green.
- TYPICAL STORIES: FOR THE CHILDREN'S HOUR—The Anxious Leaf, (also in Classic Stories). The Shoemaker and the Elves, (also in Stories to Tell to Children, Grimm's Fairy Tales, Free and Treadwell Second Reader, Great Stories for Great Holidays), Proserpina, Story of the Christ Child, Coming of the King, How the Fir Tree Became a Christmas Tree, Little Cosette, Brave Tin Soldier, (also in Anderson's Fairy Tales and Free and Treadwell's Second Reader), The Wind and the Sun (also in Aesop's Fables, In the Child World, and Stories to Tell to Children), Silvercap, or King of the Frost Fairies, Legend of the Dandelion, Clytie, (also in Nature Stories, Around the World in Myth and Song, Good Stories for Great Holidays, In the Child World, Classic Myths), Hans and the Wonderful Flower, Pippa's song, or Pippa Passes, Matsuma's Mirror, Arachne (also in Good Stories for Great Holidays), Goldenrod and Aster; STORIES TO TELL TO CHILDREN—Epaminondas, (also in Aesop's Fables and Stories Children Need), Piccola, Story of the Pink Rose; HOW TO TELL STORIES TO CHILDREN—The Pig Brother (also in Golden Windows), Star Dollars, Story of the First Christmas Tree, Legend of Christmas Eve, or the Three Wishes, The Leak in the Dyke, (also in In The Child's World), Raggylug, The Pied Piper, Why the Morning Glory Climbs; GOOD STORIES FOR GREAT HOLIDAYS—Why the Evergreens Keep Their Leaves, (also in Classic Stories and Riverside Second Reader), The Months, (also in Stories Children Need), Story of Saint Valentine, (also in Saints and Friendly Beasts), Betsey Ross and the Flag, The Lesson in Faith, (also in Parables from Nature and In the Child's World). The Little Butterfly's Brothers, The Golden

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Goose, (also in Tales of Laughter and Story 'Tellers' Magazine, December, 1914), King of the Cats; IN THE CHILD'S WORLD-Vulcan, Echo, (also in Classic Myths); STORIES CHILDREN NEED—The Bluebird; NATURE MYTHS—Why the Bear Has a Short Tail, How the Robin's Breast Became Red, The First Butterflies: AESOP'S FABLES-The Hare and the Tortoise, The Lame Man and the Blind Man, The Sun and the Wind; UNCLE REMUS; TINY HARE AND HIS FRIENDS—Why Tony Bear Went to Bed, Tony Bear's Christmas Tree, Easter Bunny, Son Cat's First Mouse, Son Cat's Surprise; TALES OF LAUGHTER—Seven at One Blow, The Wee, Wee, Mannie; HOLLOW TREE AND DEEP WOODS—A Rain in the Night, Why the Rabbit Explains; HALF A HUNDRED STORIES—Frost Fairies and Water Drops, Grandma's Thanksgiving Story, Father Time and His Children; NATURE STUDY AND LITERATURE-The Poplar Tree, Legend of a Chrysanthemum; ANDERSEN'S FAIRY TALES-Little Tuk, Great Clause and Little Clause; FAIRY TALES EVERY CHILD SHOULD KNOW—Aladdin or the Wonderful Lamp; STORIES AND STORY TELLING—Tom Thumb, (also in Hero Folk of Ancient Britain); FIRELIGHT STORIES—Why the Bear Sleeps All Winter; GRIMM'S FAIRY TALES-Cinderella; THE GOLDEN WINDOWS The Hill, The Wheatfield, The House With the Golden Windows; JAPANESE FOLK STORIES-Princess Moonbeam, Frost Rabbits; THE HAPPY PRINCE AND OTHER TALES (Oscar Wilde)-The Selfish Giant; FREE AND TREADWELL SECOND READER—The Mouse, Son Cat's Surprise; TALES OF LAUGHTER—Seven at Sleeping Beauty; RIVERSIDE SECOND READER—The Steam Engine; STORY TELLER'S MAGAZINE, March, 1914-The Foolish Bears; December, 1914-Little Gretchen and the Wooden Shoes; BIBLE-Moses in the Bullrushes.

Second Grade

The following text books offer a wide range of simple verse and folk tale in suitable form:

Child World Second Reader	Browne, Withers and Tate (John. Pub. Co.)
	Buffington, Weiner and Jones
Second Reader	Merrill
Robert Louis Stevenson Reader	(Scrib.)
Eugene Field Reader	Harris and Cooley (Scrib.)
Little Dramas for Primary Grades.	
Child Lore Dramatic Reader	Bryce and Spaulding (Scrib.)
Little Black Sambo	.Bonnerman (R. & B. Co.)
Revnard. The Fox	Smythe (Am. B. Co.)
Fairy Ring	Wiggin (G. & D.)
Merry Animal Tales	Bigham (L. B. & Co.)
Adventures of Peter Cottontail	Burgess (L. B. & Co.)
Bunny Cotton-Tail	Smith (Flan.)
Bunny Rabbit's Diary	Blaisdell (L. B. & Co.)
Aesop's Fables Vol. I and II.	Pratt-Chadwick (Ed. Pub. Co.)
Fifty Famous Fables	McMurry (J. Pub. Co.)
Little Red Riding Hood and Other	
Stories	From Lang's Blue Fairy Book (L. G. & Co.
Peacock Pie	Ragozin (W. B. Har.)
Siegfried	Children's Red Book (R. & B. Co.)
Hansel and Gretel	Baldwin
Flf Boy in Spring	Blaisdell (L. B. & Co.)
Twilight Town	Skinner (R. Mc.)
Twilight Town	Walter de la Mare (Holt)

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Tales and Customs of the Ancient

HebrewsHerbst (Flan.)Indian Story of Ji-Sheb.Jenks (At. M. & Co.)Children of the Cliff.Wiley and Edick (Ap.)Lodrix, the Little Lake Dweller.Wiley and Edick (Ap.)Children's First Book of Poetry.Emelie Kip Baker (Am. B. Co.)Graded Poetry, Book Two.Alexander-Blake (Mer. & Co.)Racketty-Packetty House (Drama) Burnett (Cen.)The Posy Ring.Wiggins and Smith (Mc. C.)Best Stories to Tell to Children.

Also the Second Readers of the Various series included in the First Grade outline. In the First Grade outline also are sources for Second Grade poetry and story.

- POETRY: CHRISTINA ROSSETTI—A Birthday Gift, The Wind It Has Such a Rainy Sound, Who has Seen the Wind, Boats Sail on the River, Now the Noisy Winds Are Still, Milking Time, A Pin Has a Head, but no Hair, O Wind, Why do you Never Rest, Fly Away Over the Sea; WILLIAM BLAKE—The Lamb, Spring, The Shepherd; KINGSLEY—The Lost Doll; MILLER—Winter Song; JACOBSON— October; GEORGE MACDONALD—Little White Lily; BREWER— Little Things; FRANCIS THOMPSON—Little Jesus; COLERIDGE —If I Had But Two Little Wings, He Prayeth Best; JANE TAYLOR —The Violet, Thank You Pretty Cow; SUSAN COOLIDGE—How the Leaves Came Down; MARY MAPES DODGE—Snowflakes, Now the Noisy Winds Are Still, Nearly Ready, Night and Day; ALMA TADEMA—Lambs in the Meadow; LYDIA MARIA CHILD—Who Stole the Bird's Nest; JOHN KENDRICK BANGS—The Little Elf; BURNS—A Child's Grace; ELIZABETH B. BROWNING—A Child's Thought of God; RANDS—The Wonderful World, The Pedlar's Caravan; LORD HOUGHTON—Goodnight and Goodmorning; MULOCK —Who Comes Dancing Over the Snow; CELIA THAXTER—The Spring; GEORGE ELIOT—Spring Song; ANN TAYLOR—The Boy and The Sheep; TENNYSON—What Does Little Birdie Say; COON-LEY WARD—Christmas Song.
- STORIES: MERRILL READER, Book III—Hop O' My Thumb. BEST STORIES TO TELL TO CHILDREN—Rumpelstiltskin, The Little Jackal and the Alligator, How Brother Rabbit Fooled the Whale and Mr. Elephant. GRIMM'S FAIRY TALES—Little One Eye. ANDER-SEN'S FAIRY TALES—The Ugly Duckling. FAIRY TALES EVERY CHILD SHOULD KNOW—Beauty and the Beast. THE CHILDREN'S HOUR—The Legend of Arbutus. VAN DYKE—The First Christmas Tree. Legend of St. Christopher (From Schonberg Cotta Family.) BIBLE STORIES told in connection with Shepherd Life: Abraham and Lot, Isaac, Jacob and Esau, Jacob and Laban, Jacob's Journeyings, Joseph, Joseph and His Brothers, Israel in Egypt, Moses, The Plagues of Egypt, Joshua, Sampson, Samuel, Saul, Goliath, Saul and David; David Made King, Sheep Shearing, The Song of Our Syrian Guest, The Twenty-third Psalm. From the back of a Sheep to the Legs of a Boy.

Third Grade

Peter Pan (A Drama)	Barrie (Scrib.)
Peter and Wendy	Barrie (Scrib.)
Pinocchio	Collodi (G. & Co.)
Snow White (A Drama)	White (D. M. & Co.)
Grimm's Fairy Tales	
Andersen's Fairy Tales-Series	Ι
and II	Stickney (H. & Co.)
Seven Little Sisters	Andrews (G. & Co.)
Each and All	Andrews (G. & Co.)

Indian LegendsJudson Animal Folk Tales......Stanley (Am. B. Co.) Japanese Twins.......Perkins (H. M.) Japanese Fairy Tales. Saints and Friendly Beasts.....Brown (H. M.) The Adventure of Nils.....Lagerlof Swiss Family Robinson.......Wyss Children's Classics in Dramatic Form Book III......Stevenson (H. M.) Paddly Pools (A Play).......Miles Malleson Blessed Birthday, a Christmas Gulliver's Travels

Graded Poetry, Book Three......Alexander-Blake Child's Year Book of Verses......Ruth Sawyer (Harp.)

Also the Third Readers of the various series included in the First Grade outline. See also the First Grade outline for poetry and story references.

- POEMS: STEVENSON—The Little Land, The Land of Story Book; LONGFELLOW—The Children's Hour; TENNYSON—The Throstle, The Snowdrop, The City Child, The Owl; BROWNING—The Pied Piper of Hamelin; JEAN INGELOW-Seven Times One; CELIA THAXTER—Wild Geese, Little Gustava; EUGENE FIELD—A Norse Lullaby, The Poppy Lady; LUCY LARCOM—Sir Robin; CHARLES and MARY LAMB—The Magpie's Nest; ALICE CARY— The Woodpecker, The Blackbird; EMILY MILLER— The Bluebird; MOORE—A visit from St. Nicholas; UNKNOWN— Lullaby of the Iroquois; MARGARET DELAND— The Christmas Silence; LAURA PUCHARDS A Child's Thenksgiring. PULEY The Borg Start RICHARDS—A Child's Thanksgiving; RILEY—The Bear Story; VANDEGRIFT—The Sandman; EMERSON—A Fable; OLIVER HERFORD—The Elf and the Dormouse; JOHN B. TABB—A Bunch of Roses; OLD CAROL-I saw Three Ships: RICHARD WATSON GILDER-A Midsummer Song; NORA PERRY-The Coming of Spring; H. H. —September; DODGE—When the Noisy Winds Are Still; EMILY DICKINSON—A Day; KIPLING—The Seal's Lullaby, The Swallow's Nest.
- STORIES: GRIMM'S Fairy Tales—Snow White and the Seven Dwarfs, The King of the Birds, The Twelve Brothers, Snow White and Rose Red, The Frog Prince, Diamonds and Toads; WILLISTON—The Tongue-Cut Sparrow; ANDERSEN'S Fairy Tales—Five Peas in a Pod, The Snow Man; AESOP'S FABLES—The Man, The Boy and the Derkey, The Create and His Methor. The Two Frages (INDIAN) Donkey, The Crab and His Mother, The Two Frogs; INDIAN LEGENDS (Judson)—SAINTS AND FRIENDLY BEASTS; The Mouse Tower on the Rhine; Pandora; INDIAN MYTHS (Judson); The Golden Touch; The Striped Chipmunk's Thanksgiving Dinner; The Golden Touch; The Striped Chipmunk's Thanksgiving Dinner; The Christmas Angel (Katherine Pyle); BIBLE—The Good Shep-herd, The Christmas Story; VAN DYKE—The Christmas Tree That Wanted to Bear Leaves; TOLSTOI—Where Love is There God is Also; Tiny Tim (from Dickens' Christmas Carol): Miss Alcott's Scrap Bag—Tilly's Christmas FOR THE CHILDREN'S HOUR— Herr Oster Hans; Stories of Lewis Clark and Pike; Sailor Man (Laura E. Richards); UNCLE REMUS; SETON—Lobo; JUNGLE BOOK Biki Tiki Toui BOOK-Riki-Tiki-Tavi.

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Fourth Grade

Hiawatha	Longfellow
Indian Logende	Remister (Mac M.)
Docas the Indian Boy	Snedden (H. & Co.)
Docas the Indian Boy Nature Myths	Holbrook (H. M.)
Robinson (Prilson	De roe (n. M.)
Arabian Nights' Entertainment	Lane (G. & Co.)
Eaglet in the Dove's Nest	Alcott
Norse Stories from the Eddas	Mabie (D. M. & Co.)
Viking Tales	Hall (G. & Co.)
Northland Heroes	Holbrook (H. M.)
Hero Folk of Ancient Britain	Wiltse (G. & Co.)
Kingsley's Heroes	Ball (G. & Co.)
Children's Classics in Dramatic	
Form-Book IV.	Stevenson (H. M.)
Men of Old Greece	.Hall (L. B. & Co.)
The Wonder Book	Hawthorne
Tanglewood Tales	Hawthorne
Fifty Famous Stories Retold	Baldwin
Stories of American Life and	
Advantura	Eggleston (Am. B. Co.)
Stories from American History	Turpin (Mer. & Co.)
Historical Plays for Children	
Historical Plays for Children Everychild's Series	Bird and Starling (Mac.)
Alice in Wonderland	Carroll
Water-Babies	Kingsley
A Little Boy Lost	.W. H. Hudson
Just So Stories	Kipling
Adventures of a Brownie	Mulock
The Rose and the Ring	Thackarey
The Wonder Clock	Pyle (Harp.)
The Golden Goose	Tappan (H. M.)
Little Daffydowndilly	Hawthorne (R. L. S.)
Six That Pass While the Lentils Boi	1
(Portmanteau Plays)	Stuart Walker (S. & K.)
Our Birds and their Nestlings	Walker (Am. B. Co.)
Black Beauty	Sewall
Sectiah Fairy Book	Grierson (Stokes)
English Fairy Tales	.Jacobs (Put.)
Blue Fairy Book	Lang (L. G. & Co.)
Dama Winging and Har Seven	
Wonderful Cats	Ruskin (Mer. & Co.)
The Tortoise and the Geese	(HM.)
East India Fables	Rajou (D.)
Starland	Ball (G. & Co.)
Astronomy from a Dinner	Clarke (HM.)
Half Hours with the Summer Stars	Proctor (MC. UI.)
Stars in Song and Legend	$Porter (G. \alpha CO.)$
Child Stories from the Masters	Meneree (R. MC.)
Delaming Founth Roadon	Bolenius (HM.)
Golden Numbers	Wiggins and Smith (McCl.)
Golden Numbers	Burt (D. P. & Co.)
Graded Poetry-Book Four	
Alas other Fourth Readers of	Series mentioned in First Grad

Also other Fourth Readers of Series mentioned in First Grade Outlines; and poetry and story sources listed earlier.

POEMS: FIELD—Little Boy Blue, The Shut Eye, Jest 'Fore Christmas; SHAKESPEARE—Hark, Hark the Lark; When That I Was and a Little Tiny Boy; HEYWOOD—Up Little Birds That Sit and Sing, Morning Song; DEKKER—Golden Slumbers Kiss You; TENNYSON —The Brook; BROWNING—Pippa's Song; WORDSWORTH—My Heart Leaps Up, Lucy Gray, The Pet Lamb, The Kitten and Falling

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Leaves; MARY HOWETT—Fairies of Caldon Low; COLERIDGE— Choral Song to the Illyrian Peasants; SWINBURNE—A Baby's Feet, A Baby's Hands, White Butterflies, A Baby's Eyes; CELIA THAXTER—Sand Piper; BRYANT—Robert of Lincoln; LONGFEL-LOW—Village Blacksmith, Christmas Bells; LOWELL—The First Snowfall, The Fountain; WHITTIER—Barefoot Boy; G. WITHER— Listening Child; RILEY—Little Orphant Annie and other poems; LEAR—Owl and the Pussy Cat; ALDRICH—Kris Kringle; JAMES HOGG—A Boy's Song; ISAAC WATTS—Cradle Hymn; EDWIN ARNOLD—The Swallows, The Swallow's Nest; THOMAS NASH— Birds in Spring; ALLINGHAM—Robin Redbreast, Wishing; CHRISTINA ROSSETTI—Hope is Like a Harebell, There's Nothing Like the Rose; ALMA TADEMA—A Blessing for the Blessed, Strange Lands, Snowdrops; BJORNSON—The Tree; HELEN GRAY CONE—Dandelions; COOLIDGE—Answers to a Child's Questions; Star Spangled Banner and America; Psalm 121.

STORIES: GRIMM'S Household Tales—The Fisherman and His Wife; ENGLISH FAIRY TALES—The White Cat, Prince Cheney; ANDERSEN'S FAIRY TALES—The Flying Trunk, The Nightingale, The Emperor's New Clothes; NORSE HEROES AND TALES—Valhalla and It's Gods, Iduna and Her Apples, Thor and the Frost Giants, Sif's Hair, Loki's Punishment; CANTERBURY TALES— Faithful Constance, Patient Criselda; AMERICAN HISTORY STOR-IES; TORTOISE AND THE GEESE—Fables; TALES from MARIA EDGEWORTH; UNCLE REMUS STORIES; BIBLE—The Gate Beautiful; Stories from SETON and WM. J. LONG; THE SPELL OF THE ROCKIES (Enos Mills)—Rob of the Rockies, Little Boy Grizzly A Midget in Fur; IN BEAVER WORLD (Mills); ROCKY MOUN-TAIN WONDERLAND—Wild Mountain Sheep, A Mountain Pony, The Grizzly Bear, My Chipmunk Callers; Marjorie Fleming; The Story of the Other Wise Man; THE CHRISTMAS GIFT—Sabot of Little Wolff (Coppee); Christmas Carol, (W. J. Long), in WAYS OF WOOD FOLK; Christmas on the Singing River (J. S. Harbon); First Thanksgiving (Blaisdell Ball), in SHORT STORIES FROM AMERI-CAN HISTORY; Old Fashioned Thanksgiving (Alcott), in AUNT JOE'S SCRAP-BAG; Runway's Thanksgiving (Borgesen), in NORSELAND TALES; A. Thanksgiving UBorgesen), in OUR HOLIDAYS; Hallowe'en Myths, in OUR HOLIDAYS (Brown and Hall).

Fifth Grade

King Arthur and His Knights	
King Arthur and His Knights	Pyle (Scrib.)
Coming and Passing of Arthur	(R. Mc.)
The Lady of Shalott: "Let the King Reign!"	; The Knights'
Vow	no Dit no Dit
Boy's King Arthur.	Lanier (Scrib.)
Knights of the Round Table	Frost (Scrib.)
Ballads:	
Boy's Percy	(Scrib.)
Marriage of Sir Gawaine	
King Ayence's Challenge	
Legend of Sir Guy	
King and the Miller	
Child	(H. M.)
King Arthur and King Cornwall	
	Rolfe (B. M.)
Stories from English History	Church (Mac.)
Lanier's Froissart	(Scrib.)
Lanier's Froissart Liegfried	(Scrib.)

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The Cid
(Famous Men of the Middle Ages)Haaren & Poland (Am. B. Co.)
Frithjof and Roland Ragozin (Put.)
Frithjof and Roland
The White Ship Rossetti
The White Ship Rossetti The Crusaders Church (Mac. Stories from the Crusades Kelman
Stories from the CrusadesKelman
St. George and the Dragon
The Boy's Mabinogian Lanier
(Many poems related in theme, as: Sohrab and Rustum, Matthew Arnold; Opportunity—Edward Rowland Sill.)
The Merry Adventures of Robin HoodPyle (Scrib.)
The Merry Adventures of Robin Hood Pyle (Scrib.) Robin Hood Ballads Gayley and Flaherty POETRY OF THE PEOPLE (G. & CO.)
Enriched by poetry of nature, of free life in the open, the forest, of bravery, helpfulness, honesty simplicity.
Ex: A Song of Sherwood, Noyes; Meg Merrilies and Robin Hood
-Keats; Under the Greenwood Tree, Blow, Blow, Thou Winter Wind
-Shakespeare.
-Shakespeare.
Shakespeare. Book of BraveryCollins Book of Golden DeedsYonge
-Shakespeare.

(CHILD CLASSICS IN DRAMATIC FORM)

Jeanne d'Arc. Joan of Arc. Verse and tales inspired by the Great son's Soul of Jeanne D'Arc, and Charlotte a Treasury of War Poetry (Clårke) Little Lame Prince. Story of My Life (Letters).	War, such as Theodosia Garri- Crawford's Vive La France, in
Little Lame Prince	Craik (H. M.)
Story of My Life (Letters) Snow Image	Hawthorne
(Poems revealing the reality of the life	fe of the imagination, as Caoch
O'Lynn-Arthur Stringer; The Daffodils-	Wordsworth; One, Two, Three
-Bunner; The Happy Little Cripple-Ri	ley.)
At the Back of the Northwind	George MacDonald
Runyan's Pligrim's Progress	vm. vaugnn Moody (R. L. S.)
The Blue Bird for Children	Maeterlinck (S B & Co)
The Dide Did	Maeterlinck (D. M. & Co.)
(Such related stories as The Search	h for the Beautiful and The
Knights of the Silver Shield-Raymond	
with the Golden Windows-Richards.) The Wonderful Chair	Browne (Scrib)
Thy Kingdom Come (an Easter Miracle p.	
Thy Minguon Come (un Suster Minute p	Atlantic Monthly Mar. '21.
Fanciful Tales	Stockton (Scrib.)
Christmas Every Day in the Year	
Heidi Moni the Goat Boy	Spyri (G. & Co.)
Hans Brinker	
The Wind Among the Willows	Grahame (Scrib.)
Master Skylark	Bennett (Cen.)
The Jungle Book	
Squirrels and Other Fur Bearers	
Among the Farmyard People	Burson
Animals at Home	Pontlott (Am P Co)
Little Brother to the Bear	Long (G. & Co.)

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Wilderness Ways	Long G. & Co.)
Wilderness Ways The First Book of Birds The Second Book of Birds	Miller (H. M.)
The Second Book of Birds	Miller (H. M.)
Birds Every Child Should Know	Doubleday (D. P. & Co.)
Our Birds and Their Nestlings	
Our Humble Helpers	Fabre (Cen.)
Birds Legends and Life	
One Hundred Anecdotes of Animals	Billinghurst (Lane)
The Training of Wild Animals	Billinghurst (Lane)
Bear Stories	Carter (Cen.)
The Story of a Cat	Aldrich
The Oregon Trail	Parkman
Flamingo Feather	Monroe (Harp)
Grandfather's Chair	Hawthorne
Johnny Appleseed	Atkinson (Harp.) (G. & D.)
Johnny Appleseed (poem)	Vachel Lindsav
Santa Fe Trail	Vachel Lindsav (Mac.)
Story of a Thousand Year Pine	
Cambridge Book of Poetry for Young People	Kenneth Grahame (Put.)
(Also much poetry in romantic and pa	
history interests of the grade, as: Columbus	
Crossing the Plains-Miller; Drake's Drum	-Newbolt; The Revenge-

Tennyson; Landing of the Pilgrims—Hemans; Paul Revere's Ride—Long-fellow.)

Readers: Bolenius Sixth, Riverside Sixth.

Sixth Grade, B Class

The Dog of Flanders	Ouida (HM.)
Pierrot, a Dog of Belgium	Dyer (D. P. & Co.)
Stories of Brave Dogs	Carter (Cen.)
Beautiful Joe Buck, an Alaskan Husky Bolenius VI (H-M)	Saunders
Buck, an Alaskan Husky	London
D'lles the Dee Thet Med. C. d	. t D
Billy, the Dog That Made Good	Seton
Cuff and The Woodchuck	Burroughs
Cuff and The Woodchuck Bolenius VI Rab and His Friends	
Rab and His Friends.	Brown
The Wonder Book of Horses	Baldwin (Cen.)
Midget. The Return Horse	Mills
Riverside VI (H-M)	
Riverside VI (H-M) The Bell of Atri	Longfellow
Riverside VI	
Undine	Fouque (G. & Co.)
The Nurnberg Stove	Ouida (H-M)
Kipling Stories and Poems Every Child Should Know	v
A Legend of St. Nicholas (a drama)	Dix
	(Poet Lore, VI. 25)
The Adventures of Ulysses	Church (Mac)
	Lamb (H. & Co.)
Ulysses The Story of Ulysses Elson Gram. Sch. R. II	
The Stewart of Illugger Elgen Chons Seb D II	Tennyson
The Story of Ulysses Lison Gram. Sch. K. H.	(S. F. & Co.)
Tanglewood Tales	Hawthorne
Wonder Book Story of the Aeneid Frithiof The Bold The Story of Nansen Containing (Northland Harcon)	Hawthorne
Frithief The Bold	Unurch (Mac.)
The Story of Nanson	
Captain January (Northland Heroes)	Pichanda (D)
The Life Savers	Otta (D)
The Sea	Computed I
The Inchcape Rock	Southor
The meneupe work	Boutney

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The Wreck of the Hesperus	Longfellow
The Chambered Nautilus	Holmes
*Casabianca	Hemans
Sir Patrick Spens (Poetry of the People)	
The Long White Seam.	Kipling
*The White Seal	Kipling
Around the World in the Sloop Spray	Slocum (Scrib.)
Around the World in Eighty Days	Verne
Twenty Thousand Leagues Under the Sea	Verne
The Mysterious Island	Verne
*Travel	Bates
The Dragon; a Wonder Play	Lady Gregory (Put.)

Sixth Grade, A Class

The Iliad		Iac.	M.)
*Bryant's Iliad (Selections)			
*Pope's Iliad (Selections)			
Brook's Story of the Iliad			
Hero Tales	Baldwin	(Sci	rib.)

*PARIS AND HELEN *IPHIGENIA

Stories of Old Greece	
Stories of Old Greece and Rome	
Story of the Greeks	Guerber (Mm. B. Co.)
Book of Golden Deeds	Yonge
The Golden Fleece	Baldwin (Am. B. Co.)
Plutarch's Tales (Greek)	Gould
	Longfellow
The Story of Achilles Elson Gram. Sch. R. II.	
The Story of the Trojan War Riverside VI	
Plutarch's Tales (Roman)	Gould (H. & B.)
Lays of Ancient Rome	MacCaulay
The King of the Golden River.	Ruskin (R. L. S.)
Why the Chimes Rang	Alden
	Wilde
The Happy Prince	Wilde
A Pot of Broth (a Folk Play)	Wm. Butler Yeats (Mac M)
	(Mac M)

SIXTH GRADE READERS

Bolenius VI (H-M) Riverside VI Van Sickle & Seegmiller (H-M) Winston Silent Reader VI (J. W. Co.)

Seventh Grade, B Class

The Courteship of Miles Standish	Longfellow (S. L. S.) (R. L. S.)
The Gentle Boy	Longfellow
Giles Corey	
Mabel Martin	Whittier
Conquest of the Old Northwest	
The Landing of the Pilgrims	Homans
The Building of the Ship	Longfellow
A Hunting of the Deer	Warner (R. L. S.)
Lady of the Lake (Prelude)	Scott
Wabb: The Story of a Grizzly	Seton (Scrib.)
Johnny Bear	Seton (Scrib.)
Twin Babies	Joaquin Miller
Baby Sylvester	Bret Harte

Riverside VI.

(H. M. Co.)

(H-M)

Raggylug	Seton (Scrib.)
Redruff	
Tito	Seton (Scrib.)
The Mother Teal	
Reynard the Fox	John Masefield (Mac.)
Donald	Browning
Loveliness	Elizabeth Stuart Phelps (H M)
A Christmas Carol	Dickens (R L S)
The Post Office (a Drama)	
The Story of Scotch	Mills
Wild Life in the	Rockies (H-M)

Riverside VIII

The Call of the Wild	London (Mac.)
Before Adam	London (Mac.)
Jerry	London
Bob Son of Battle	Oliphant
*The Dog	Peabody
Our Friend the Dog.	Materlinck
Pierrot	
Greyfrairs Bobby	Atkinson
Bingo	Seton (Scrib.)
Wully	Seton (Scrib)
Wild Animals I have Known	(20112.)
Chink	Seton
Lives of the Hunted.	
Snapper	Andrevev
A Dog's Tale	Mark Twain (Harp.)
That Pup	Butler (D. P. & Co.)

Seventh Grade, A Class

The Great Stone Face	Hawthorne
King Robert of Sicily	Tales of the White Hills (H-M) Longfellow
The Legend Beautiful	Tales of a Wayside Inn (H-M) Longfellow
The Bluebird A Handful of Clay	Tales of a Wayside Inn (H-M) Maeterlinck
A Handful of Clay	Van Dyke
*What Men Live By	Riverside VI (H-M) Tolstoi
*Where Love Is There God Is Als	oTolstoi
Three Arshins of Land	Tolstol
Abou Ben Adhem	Riverside VI (H-M)
Abou Den Aunem	Riverside VI
Friar Jerome's Beautiful Book	Aldmich
The Sandalwood Box	Picktha
	Atlantic Monthly
Prue and I *The Vision of Sir Launfal	Curtis
*The Vision of Sir Launfal	Lowell
The Hour Glass (a Miracle Play)	
The Traveling Man (a Miracle Play Snowbound	
The First Snewfell	Lowell
The First Snowfall. The Snow	Lowell
*The Cotter's Saturday Night	
The Huskers	Burns Tennyson

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*Dora	Tennyson
Peasant and Prince	Martineau
	Taylor
	Riverside VI (H-M)
Winter (Sin I f-1)	Riverside VI (H-M)
Winter (Sir Launfal)	Lowell
Evangeline	Longfellow (R. L. S.)
Last of the Mohicans	Longfellow (R. L. S.) Cooper (N. Pub. Co.)
leerslaver	Cooper (N Pith Co)
	Burroughs (H-M)
Birds of Killingsworth	Longfellow
birds of minings of the	Tales of a Wayside Inn (H-M)
*The Leeledow of Dheima	
The Jackuaw of Mielins	Barham
The Humble Bee	Emerson
Bee People	
The Story of Peggy Mel	Burroughs
	Bolenius VI (H-M)
Fabre (Transl	
Seventh Grade Readers	
Riverside VII.	Van Gielden and Geegmeillen (II M)
	Van Sickles and Seegmiller (H-M)
Winston Silent Reader VII	(J. W. Co.)
Wild Life in the Rockies	Mills (H-M)

Eighth Grade, B Class

Rip Van Winkle.	Irving		
	Knickerbocker Stories (S. L. S.)		
Lowond of Sloopy Hollow			
Tam O'Shanter	Burns		
Goblin Market			
Treasure Island	Stevenson (G & Co.)		
Kidnapped	Stevenson		
Letters to "Cunny" and Tomarche	er		
	Riverside VII (H-M)		
Tempest	Shakespeare (H-M)		
Tempest			
	Riverside VII (H-M)		
Coaly-Bay, the Outlaw Horse			
Coaly-Bay, the Outlaw Horse	J. H. Lit II (S. F. & Co.)		
The Thundering Hord	Hawkes		
The Thundering Heru.	J. H. Lit II (S. F. & Co.)		
Vixen	Seton (Scrib.)		
Lobo			
	Lives of the Hunted		
David Copperfield	Dickens (G. & Co.)		
David Copperfield Ten Boys from Dickens			
Ten Girls from Dickens			
Ten Girls from Dickens Oliver Twist	Dickens		
'I'om Sawyer			
Huckleberry Finn	Mark Twain		
Penrod			
The Story of a Bad Boy	Aldrich		
At Dotheboys Hall	• Dickens		
Tem Dreven's School Dava	Riverside VI (H-M)		
Tom Brown's School Days The Varmint	• Wiston		
Jan of the Windmill	Ewing		
Captains Courageous			
The Man Without a Country			
Love of Country *Present Crisis			
Gettysburg Address			
activising Autress	Lincom		

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Flanders Field	cCrae
J. H. Lit II (S. F America Answers	. Co.)
America Answers	
J. H. I Message to Garcia	
Message to GarciaHu	bbard
The Perfect Tribute	drews
Abraham Lincoln	llson
Letter to Mrs. Bixby	incoln
Abraham Lincoln Walks at MidnightLi	ndsay
Abraham Lincoln Walks at Midnight	M.)
	licher
Lincoln Mar Lincoln Sto	kham
Lincoln	ddard
Lincoln	hoate
O Captain, My Captain	itman
Definition of a GentlemenNe	wman
Wilson's Address to Congress April 1917	1.
"Selections from Washington, Lincoln and Grant"	
Lee's Farewell Address	
Rules of ConductWashi	ngton
Lee's Farewell Address Rules of Conduct	anklin
Grandmother's Story of Bunker Hill	H-M)
Grandmother's Story of Bunker HillH	olmes
Concord Hym	erson
Barbara FritetchieWł	nittier
Boys of 76 Coffin (F	(arp.)
Up From Slavery	z Co.)
Recessional	ipling
The Yellow Jacket (a Drama)	3. M.)

Eighth Grade, A Class

Midsummer Night's Dream The Culprit Fay *Christabel	
The Culprit Fay	(Knick Pr.)
Chiristabei	Coleridge
A Bunch of Herbs Apples	Burroughs (R. L. S.)
Apples	Burroughs
Strawberries	Burroughs
Wooka	Burroughs
Weeks Sharp Eyes	Burroughs
Winter Neighbors	Burroughs
Camping	Warner
Being a Boy	Worner
Being a Boy	Millor
The Blue Jay	Lomb
Bobo	D' VIT (IT M)
John Burroughs	Riverside VII (H-MI)
Julius Caesar	Shakespeare
William Tell*	Schiller
TTITICAL CONTINUES OF	(McMurry Transl.)
Lady of The Lake	Scott
Tales of a Grandfather	Scott
Tales of a Grandlather	Scott
The Talisman	Child (IT M)
English Ballads	Contra (H-M)
Kinmont Willie	Gummere (Mac.)
Jock O'the Side	
Archie O'Cawfield	
Hobie Nobe	
Dick O'the Cow	
Adam O'Gordon	
(and others)	

The Gold Bug Buccaneers and Pirates of Our Co The Great Carbuncle	Poe (H. M.)
Buccaneers and Pirates of Our Co	oastStockton
The Great Carbuncle	Hawthorne
The Purloined Letter	Tales of the White Hills (H-M)
The Purloined Letter	Poe
Masque of the Red Death Incident in a French Camp	Poe
I That I Do L C	J. H. Lit. II (S. F. & Co.)
Incident in a French Camp	Dimensida VI (II M)
The First Grenadier of France	Riverside VI (H-M)
The First Grenauler of France	Edson Laing V (S Co)
The Field of Waterloo	Buron
The Charge of the Light Brigade	Tennyson
*Charge of the Heavy Brigade	Tennyson
Defense of Lucknow	Tennyson
Herve Riel	Browning
Puck of Pook's Hill	Kipling
Drums of the Fore and Aft	Kipling
Story of a Short Life	Ewing
Ballad of East and West	
Ballad of the White Horse	Chesterton
Poems from Kipling and Fletcher's	s Hist. of Eng.
Tommy Atkins.	
Fuzzy Wuzzy	Kipling
The Recessional	Kipling
The Kipling Readers for Upper Grade	$(\Lambda n \& C_0)$
Pantaloon (a Play) (Half Hours)	Barrie
How They Brought the Good News fro	om Ghent to Aix Browning
Lochinvar	Browning
	Whittier
The Deacon's Masterpiece	Holmes
Sheridan's Ride	Reade
	Cowper
Tam O'Shanter	Burns
Paul Revere	Longfellow
The Leap of Roushan Beg	Longfellow
Song of the Chattahoochie	
The Brook	
The Cataract of Lodore	Southey
Miscellaneous Humor. Don Quixote	Cervantes
A Vankee in King Arthur's Court	Mark Twain
Ransom of Red Chief	
Pigs Is Pigs	Butler
Nonsense Verse	Lear
Nonsense Novels	Leacock (Lane)
	Burgess (S. Co.)
Jabberwocky	Carroll
The Little Peach	Field
New Eng. Weather	Mark Twain
Ballad of the New England Oyste	ermanHolmes Cervantes
A Vankoo in King Arthur's Count	
A Tankee in King Arthur's Court	hlad to a finite start in the last
Selections for grades 5, 6, 7, 8 in	black type are for intensive study;
selections starred * to be presented by extensive reading related in idea to the	e central unit
CAUCHOIVE LEAUING LEIALEU IN IUCA LO UN	c constat units.

Publishers

(Ap. & Co.)—Appleton an	nd Co	New York
(Am. B. Co.)—American	Book Co	Chicago

(At. M. & Co.)-Atchinson, Mentgee & Co	Chicago
(B & Co.)—F. D. Beatty and Co	New York
(B M)_Bobbs_Merrill	Indianapolis
(Cen.)—Century Co	New York
(Cen.)—Century Co	New York
(D M & Co)—Dodd, Mead and Co.	New York
(D) Dutton Co	New York
(D P & Co) Doubleday Page and Co.	New York
(Ed Pub Co) Educational Publishing Co	
(Ed. Pub. Co.)—Educational Publishing Co. (Flan.)—Flanagan	Chicago
(C & Co) Cinn and Co	Chicago
(G. & Co.)—Grossett & Dunlap	New York
(Harp.)—Harper and Bros	New York
(Harp.)—Harper and Bros.	
(W. B. Har.)—Wm. Veverley Harrison (H. & Co.)—D. C. Beath and Co	Chicago
(H. & Co.) - D. C. Beatn and Co	Chicago
(Holt)—Houghton, Mifflin Co	Dichmond
(J. Pub. Co.)—B. F. Johnston Pub. Co.	Norr Vorla
(Knick, Pr.)-Knickerbocker Press, G. S. Putnam and	SonsNew Tork
(Lane)—John Lane Co	New IOrk
(L. B. & Co.)—Little, Brown and Co	Chicago
(L. B. & Co.)—Little, Brown and Co (L. G. & Co.)—Longmans, Green and Co	Chicago
(I. I. & S)_Lothron Lee & Shenard Co.	Boston
(L. & C.)—Lyons and Carnahan	Chicago
(Mac) Macmillan Co	Unicago
(Mac.)—Maclinan Contaction (Mc. Cl.)—McClure	New York
(Brad.)—Milton Bradley Co	Springfield, Mass.
(Mer & Co)-Charles Merrill and Co.	New York
(N & Co)—Newson and Co.	New York
(P) Page Co	Boston
(Pub Sch) Public School Pub Co	Bloomington, III.
(Put)—Putnam (R. Mc.)—Rand McNally.	New York
(R. Mc.)-Rand McNally	Chicago
(R. I. S.)—Riverside Literature Series, Houghton MII	In Company
(R. & B. Co.)—Reilly and Britton Co. (R. P. & Co.)—Row, Peterson and Co	
(R. P. & Co.)-Row, Peterson and Co.	Chicago
(S & Co) B H Sanborn and Co.	Unicago
(Scrib)—Charles Scribners Sons	New York
(S F & Co)-Scott, Foresman and Co.	
(G I G) Standard Literature Series Newson and Co	ompany, New York
(S. & K.)-Stewart & Kidd Co	Cincinnati
(S. & K.)—Stawart & Kidd Co.— (S. Co.)—F. A. Stokes Co.	New York
(Univ. Pub. Co.)—University Publishing Co., Newson a	and Co., New York
(J. W. Co.)—John C. Winston Co	Chicago

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Language and Composition*

The Aim of the Whole Course.

The aim of the whole course in oral and written composition is to train all the children to express their thoughts in good English and in logically arranged sentences. This involves not only, constructive teaching in the use of words, in sentence makig, in the orderly arrangement of sentences into paragraphs, but also the eradication of speech faults which the child brings with him to school from the street and from homes and early environment in which faulty speech prevails. Since inelegant speech, gramatical errors, bad spelling, vulgarisms, slang and the like are much more striking than faulty sentence structure, illogical order of sentences, indistinct enunciation, and loose thinking, it appears that the larger phase of this work is corrective and not constructive. This is not the case. Important as the corrective side of English teaching is, the larger task is the constructive. A teacher must not be satisfied with merely suppressing faulty speech. She must so draw her children out that they will not only be able to say something correctly, but will also have something worth saying correctly.

Minimum Expectations.

Some children come to school with good speech habits already formed, with the ability to speak easily and accurately. Others have none of this valuable home training. Of course the less fortunate will not speak and write as well as the best at the end of a school year. It is, however, desirable and entirely possible to set a minimum standard of achievement and to expect the best and the poorest to do at least as much as the standard implies. (See example of these minimum expectations at the close of the outline of the work of each grade in Mahoney's Standards in English.

Accuracy First or Fluency First.

There are two groups of English teachers, one of which insists upon fluency first. Teachers in this group want children to say what they think without trying consciously to be accurate. They do not want the progress of their children to be impeded by forty-nine danger signs. along the way. If, as the children proceed along their primrose bordered language way with their pink hair ribbons in an ideal blue haze, they stumble over a wrong pronoun or verb or a vulgar "aint got no" or "them there,' 'they are to be gently sprayed with perfumed grammar long after they have finished their stroll through the flowery fields of speech, and thus cleansed of all their linguistic transgressions. The other group believe that "I seen" is as disfigurilng as dirt under the finger nails and that it should be carefully scrubbed away as quickly as possible. With them accuracy first is essential. The one group would have the children talk much, write much, compose stories, edit little and group projects and would expect interest in the task to impel the school papers, write poems and essays, and work out extended individual children to seek and find the accurate and logical way of saying the the things that are in their minds. The advocates of "accuracy first" believe that learning the art of speaking and writing is like learning to play a musical instrument, that little pieces carefully and accurately done soon give skill and power and confidence to undertake more complex things.

It is regretably obvious that the graduates of our elementary schools do not master the simple technic of speech and writing. Teachers do not even assume that verbs and pronouns can be mastered once for all like the multiplication tables. They tacitly admit that the prevailing "fluency first" program fails. French children are taught by the accurate, little five-finger exercise first, and are admitted by better writers and speakers than American children. Colorado Teachers Col-

*This outline has been prepared by Dean E. A. Cross, Head of Department of English and Literature, Colorado State Teacher College. lege believes that it is better for a fourth grade child to be able to write four simple sentences about a pet dog or making a doll's dress and to arrange them in a logical sequence than to write an incoherent, ungrammatical, unpunctuated, misspelled narrative about the life of the pioneers of Colorado. In other words the College is frankly for accuracy first.

But "accuracy first" does not mean "fluency never." Our plan provides for both types of composition. In the formal language work the assignments call for short pieces of work accurately done; but in the informal work in language, such as is called for in the various individual and group projects in connection with the lessons in literature, history, hygiene, geography, arithmetic, etc., there is ample room for practice upon larger units with more attention to the thing said and less to the details of construction.

Lists of Errors to be Corrected.

It is the intention of the course to provide for the correction in each grade of a few errors prevalent among the pupils of that grade and others which belong to individual pupils. No lists are given for the different grades because the errors are not known until the teacher actually catalogs them for the grade and for individual pupils. It will be found when such a catalog is made that the list is small and the task of eliminating the errors actually possible. The teacher is warned against the practice of attacking "school ma'am" errors which are not errors at all, such as the correct use of "have got" and the preposition at the end of a sentence. There are enough real errors to engage all the teacher's ingenuity without attacking such fanciful errors such as these which are in good literary usage. The number of real errors will be found to be encouragingly small. If a few are attacked and slain in each grade the language of the pupils will be greatly improved long before the end of the elementary school period. (See Mahoney pp. 13 and 14).

The English Period.

In all the grades there should be a special period set aside for the language lesson. In this time there should be the assignment and talking over of the topics, the oral telling, dramatizing, etc., the writing, self criticism, revising, etc.—not all in one day, but each in its turn. In the grades above the fourth all this work of oral and written composition should be carried on in connection with the work of the other classes; and every class, positively every one, should be an English class. Constant drill in the use of correct forms and constant correction of all sorts of the errors must be carried on in all the classes of the school day. While it is good for upper grade children to know why a certain form, construction, or punctuation mark is correct so that they may become self-criticizing, it must be remembered that no child ever learned to speak correctly by learning the rules of grammar. Speech-faults must be worn out and correct habits rubbed in.

Copying From the Blackboard and From Dictation.

Young children should have frequent practice in copying correctly written sentences from the blackboard. Older children should occasionally be given that kind of drill. It makes them conscious of capitals, punctuation marks, spelling, arrangement, etc.

Thruout the grades there should be almost daily opportunity for writing from dictation. This can be done in any class during the school day. It may be done just as well in the history class as in the English. Whenever it is done it should be brief. Exactness should be required. A half sheet of ruled paper, unform for all the class will be an aid to both pupil and teacher. It will suggest neatness and will encourage by its brevity.

Self Criticism.

Pupils should be taught to examine all of their writing before it is

handed to the teacher. This applies especially to the short pieces copied from the board or from dictation. Have them read through the sentences first to see that no words have been omitted, second to see that capitals, spelling, and punctuation are satisfactory. Insist on neat, careful, penmanship-the best the pupil is capable of.

A Word of Encouragement.

If you are a teacher, you can really teach children to speak and write just as surely as you can teach them the multiplication tables; and you can teach English so that it will stay taught and not have to be done over and over and the never done, as is the usual expectation in the schools.

First Grade

All of the English work in the first grade is oral. Its purpose is to get from children free expression in correct simple sentences. Eradicating faulty speech habits and preventing the formation of new ones by guiding the child into correct speech ways is a second and equally important purpose.

Aims.

- To encourage children to talk freely about the things they are 1. interested in.
- 2. To secure distinct articulation and a natural speaking tone.
- 3. To correct a few errors of speech—those that are simple and the most noticeable.
- To make a beginning in the conscious use of simple sentences. 4.

Means and Ways.

- Story telling by the teacher-the children getting their use of 1 language through hearing stories told simply, in correct language, and with a careful choice of words.
- Dramatization of the stories told by the teacher. The pupils' 2. contribution should be in simple sentences. The "and", "so" and "and so" habits should be avoided.
- Children's "stories". These are used to encourage children to 3. talk simply, freely, and correctly about the things they are interested in.

The typical story is something like this:

Teacher—A vacant lot makes a good playground. What do you like to play?

Harry-I like to play Indian.

Nancy-We like to play house.

John-My brother and I made a cave on a vacant lot.

Teacher-How would you play house on a vacant lot. Tell me three things you did.

Mary-We raked the leaves up in little rows. There were were the walls of the rooms. We found pieces of broken dishes for our table.

Topics for Children's Stories.

a. Home objects and experiences, such as: Playthings, pets, helping, home happenings, anecdotes, good times on holidays and Saturdays.

b. School objects and experiences, such as: Playmates, playground incidents, the reading lesson, dramatizations, story reproduction, picture lessons.

- c. Flowers, birds, animals. d. Lessons in manners.

Correction of Childrens' Errors of Speech.

a. Verb errors, such as: I seen it, I come early yesterday, I done that. She aint comin'.

- b. Pronoun errors, such as: Me and him tried it.
- c. Provincialisms and slang.
- d. Mispronunciations.

The Use of Word Cards and Sentence Cards.

While there is no writing in the first grade, the children learn to recognize words and the alphabet in script. With these sentences are built, and the child forms the habit of beginning a sentence with a capital letter and closing with a period or a question mark.

Before leaving the grade each child should be able with the alphabet letters to make his own name and address using a comma between the names of the city and state thus:

Alice Martin

815 Seventh Street

Greeley, Colorado

Also the habit of using the capital "I" should be fixed, as well as the use of a capital letter at the beginning of the card-constructed sentence, and the period or question mark at the end of a sentence so constructed.

Chubb, The Teaching of English, Chapters 3 and 4.

References.

Mahoney, Standards in English, Pages 41 to 50 and 4 to 38. Sheridan, Speaking and Writing English, Pages 51 to 61 and 1 to 46.

Brown, How the French Boy Learns to Write, Chapter 3.

Second Grade

In the second grade the pupil is expected to make a beginning of writing. During the early weeks in this grade the composition is all oral except for a continuation of the card-constructed sentences, such as were used in the latter half year of the first grade. After that the writing of little sentences is begun. This work is continued through the year. At the end of the time each pupil should be able to write simple "stories" composed of from two to five simple sentences each correctly written and all arranged in an orderly sequence. The oral story telling is kept simple also, but the stories may be made up of more sentences than occur in the written.

Aims.

- 1. To develop ability in each pupil to construct orally simple stories of five or six related sentences.
- 2. To give practice in the oral reproduction of short, simple stories told by the teacher.
- 3. To eradicate a few of the noticeable errors in speech common to this grade.
- 4. To make a beginning of writing, in the end aiming to secure the skill in each pupil to write from three to five related sentences accurately with respect to capitalization, spelling, and punctuation.

Means and Ways.

- 1. Alphabet cards and word cards with which to construct short sentences copied from the blackboard, dictated by the teacher, or made up by the pupil. The use of these cards should be discontinued by the end of the first half of the year—before if the pupils have made sufficient progress in writing.
- 2. Stories told by the teacher and later retold by the children, the teacher guarding against the habit of "running on" by making use of "and", "so", and "and so" where new sentences should begin. She should see to it that neither she nor the children develop or continue this habit.
- children develop or continue this habit.3. A continuation of the dramatization of little stories, the object being to get the children interested in thinking of something to say and then to say it correctly.
- 4. A list of the outstanding errors which the children of this particular grade make and which the teacher is determined to correct during the year.

The tendency will be to take a ready made list from some book,

and to drill all the children on all the expressions. That's the easy way. Do not be tempted. Make your own list. Keep a note book something like the sample below:

Individual Errors of my Pupils to be Corrected This Year.

Edmund-I done it, Aint got no, Got it offa him. Carol-Hadn't ought to, hisself, "would of" fer "would have".

Charles-Knowed, "they was" for "there was" them kind.

Nancy-She do'nt, gimme, "done" for "did".

Keep an account book with a page devoted to each pupil. Cross out an error when it ceases to be used. Occasionally exhibit the book to the pupils.

Make your account book a double entry system. Keep a page for each error that is made by as many as five in the grade, thus:

> "done" for "did" Mary Kate John *Samuel James Harry *Nancy

*Check off a name when ever a pupil conquers that error.

Don't try to make perfect speakers of your pupils in this grade. If you do, they will be perfect because they are not saying anything. Attack from a dozen to twenty errors with the determination that the third grade teacher shall not have those to subdue. She will have others a plenty but not these. Sufficient unto the grade are the errors thereof.

Writing: The writing consists of simple sentences:

(a). Copied from the blackboard, (b) written from dictation, and (c). made by the pupil.

The pupils should be taught to examine their own work to see that it is correct before handing it to the teacher. This may be done by comparing it with the teacher's correct copy on the blackboard, first, to see that each sentence begins with a capital letter and ends with a period or question mark; second, that no word has been omitted, and third, that all the words are correctly spelled.

No long narrative is attempted in writing in the second grade. We are content if at the end of the year all the pupils can write correctly a "story" of three, four, or five short, simple sentences.

Technical Items: 6.

- Capitals: At the beginning of a sentence. a.
- Names of persons, places, days of the week, the months, and the word I.
- Punctuation: Period at the end of a telling sentence and after b. the abbreviations Mr. and Mrs. Question mark at the close of sentence that asks a question.

References.

5.

Brown-How the French Boy Learns to Write, Chapter 3. Mahoney-Standards in English, Pages 4 to 38 and pages 51 to 61. Sheridan-Speaking and Writing English, Pages 1 to 46 and pages 61 to 74.

Third Grade

The composition in the third grade is still largely oral and is still such as would grow naturally out of the child's own experiences. Freedom of expression in correct, simple natural language is the aim of the grade. The campaign against a few errors is carried over from the second grade, with a book account of the progress made by each

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pupil against his special errors and by the whole grade against the small list of common errors.

In reading and literature real progress is made in this grade toward a mastery of the technic of reading so that the child begins to get some pleasure out of what he reads in addition to that which comes from mastering the mechanics of reading. Aims.

- 1. To develop in all the children the power to express themselves simply in natural, clear, correct English.
- 2. To conquer a few of the errors common to the children of this grade.
- 3. To teach the spelling of such words as are frequently used in in writing in this grade.
- 4. To make a beginning in the reading of literature which is within the range of comprehension of third grade children.

Ways, Means and Materials.

- 1. Accuracy is the first essential; freedom and fluency are no less essential, but they must not be secured at the expense of accuracy.
- 2. Language games are still made use of to drill in accurate expression.
- 3. The means used to give practice in oral expression are:
 - a. Retelling simple stories.
 - b. Telling original stories, using topics and models suggested

by the teacher, and also those thought of by the children.

c. Relating anecdotes.

In all the work noted above the war against "and", "and so", and "so", "then", and "and then" must be vigorously kept up. Don't overdo it tho, and leave the impression that these are never to be used. This has been done with the word "got". The aim is to get the child to use simple telling, asking, and exclaiming sentences with only the occasional use of the compound sentence. The complex sentence with the relative and adverbial clauses for most children is not natural at this age.

d. Memorizing verses, and whole poems.

- e. Making origial rhymes and riddles.
- f. "Stories" growing out of picture study; i. e., three, four, or five related simple sentences about a picture.
- g. Dramatizations.
- h. Conversations growing out of the development of projects in history, geography, reading, etc.
- 4. The means used to give practice in written expression in this grade are:
 - a. Copying from the blackboard and from books single sentences and brief "stories" of from three to five sentences.
 - b. Copying from dictation the same sort of sentences and "stories." This copying (a and b) should be **daily** practice. There is nothing like it to accustom children to the look of correct forms and to the habit of writing neatly and with mechanical accuracy.
 - c. The occasional short written reproduction of stories told in the class—at first copied from the board, and later without this intermediate copying step.

The teacher will find that any device which makes the task of writing seem possible and simple will greatly increase the accuracy of the work. These devices are suggested: 1. Uniform half-sheets of paper, 8x5 1-2 inches, ruled the long way. 2. Stories three to five sentences in length. 3. Self correction, consisting of one look through to see if all the words are there, a second for spelling, and a third for capital letters and punctuation.

All of this formal written work must be read and marked

by the teacher, but it should be corrected only for the technical matters taught in grades two and three.

- d. Brief letters and invitations with headings and endings copied from models.
- e. Technical Items

New abbreviations: Dr. and Colo.

New uses of capital letters: At the beginning of each line of poetry.

Indentation of a paragraph.

Commas in a series of words.

Contractions: Don't, doesn't, can't, isn't, I'll, I'm. it's for "it is".

Exclamation point at the end of an exclamatory sentence. References.

Brown—How the French Boy Learns to Write, Chapter 3.

Mahoney—Standards in English, Pages 4 to 38 and pages 62 to 72. Sheridan—Speaking and writing English, Pages 1 to 46 and pages 74 to 85.

Fourth Grade

While the language period is still used, there is less need in the fourth grade and the grades above for a stated period for the language lesson (especially the oral) and a greater need to give attention to language in all the lessons of the day. The language period is retained, however, but may be used when needed for the written work in connection with other lessons, such as history, geography, nature study, etc.

With a growing mastery of the mechanics of reading a wider interest in children's literature itself is possible, but in the fourth grade there is still the problem of actually learning to read well enough that reading itself shall in time cease to be an effort. Aims.

- To make it possible for each child in the grade to speak his thoughts clearly, in well chosen words, in correct sentences whatever he is thinking that may be worth telling to others.
 To secure an acceptable and pleasing bearing and manner in
- 2. To secure an acceptable and pleasing bearing and manner in speaking, and to cultivate speaking voices that may be heard by all the children in the room without becoming loud, or strained or in any other way unnatural.
- 3. In oral and written composition to help the children to have something to say and to want to say it rather than merely to be saying something.
- 4. In the literature to begin to make the pieces of literature sources of pleasure in themselves, beyond the pleasure of conquering the mechanical difficulties of reading.
- 5. To attack and conquer another group of errors in speech and writing which are either peculiar to this age or which have been left over from earlier grade.

Means, Ways and Materials.

In Oral and Written Composition:

- 1. A continuation of the copying from the blackboard and from dictation. (See directions in Grade three concerning uniform paper, and the pupils' self criticism of his work). Occasionally allow the pupils to write on the blackboard. Visible comparison helps.
- 2. Picture studies continued.
- 3. Reproducing, in original language, stories told by the teacher. Telling stories from points of view different from the original.
- 4. The recitation, oral or written, in every class throughout the day should be regarded as a part of the work in English.
- 5. Dramatizations.

- 6. The oral preparation and the writing in connection with working up individual and group projects in history, arithmetic, geography, literature, etc.
- 7. Letter writing. Forms for addressing an envelope. Informal friendly letters. Invitations. Simple business letters. Real problems are used as the basis of all the letter writing. writing.

Technical Items.

- 1. The apostrophe and s with singular nouns to denote possession.
- 2. Other contractions in addition to those indicated in grade three as need for them arises.
- 3. How to find the meaning and correct spelling of words by using the dictionary. Dictionary games.
- 4. No new uses of punctuation in addition to those shown in earlier grades.

References:

Brown-How the French Boy Learns to Write, Chapter 3.

Mahoney—Standards in English, Pages 4 to 38 and pages 73 to 89. Sheridan—Speaking and Writing English, Pages 1 to 46 and pages 86 to 96.

Fifth Grade

A definite time is still set aside in the program of the fifth grade for oral and written composition, but every piece of spoken English in every class is English work and every piece of copying from dictation, copying from the blackboard or original writing is written English. In this way the items enumerated below are covered. In language the teacher will use the geagraphy material one day for the idea upon which to base the written language paragraph, another day upon nature study, another upon history, etc.

- 1. Picture study.
- 2. Story telling.
- 3. Dramatization.
- 4. The writing of business and friendly letters, and of informal social notes.
- 5. Descriptions of persons, places and things.
- 6. Giving directions.
- 7. Expressing a thought in different ways.
- 8. Writing biographical sketches.
- 9. Copying from dictation.

Additional Technical Items.

- 1. The use of the complex sentence and the punctuation appropriate to that type of sentence.
- 2. The writing of conversation and the use of quotation marks.
- 3. The conquest of a group of speech-faults belonging to the pupils of this grade.

Grammar.

Thruout the grades from the fifth upward reasons are given when corrections are made and the grammatical terms are freely used where explanations are made.

No systematic teaching of grammar is attempted, but incidentally all the facts of grammar that have any useful bearing upon children's speech will be covered in a reasonable length of time.

References.

Brown—How the French Boy Learns to Write, Chapter 3.

Mahoney—Standards in English, pages 4 to 38 and pages 90 to 103.

Sheridan—Speaking and Writing English, pages 1 to 46 and pages 97 to 109.

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Sixth Grade

The same procedure is followed in the sixth grade as has been suggested for the fifth. It must not be supposed that there is no systematic language study in these grades. The systematic direction of speech and writing is relentless, never-ending. It must go on in every class, every day.

Grammar.

By the time the pupil has reached the end of the sixth grade he should have met every functioning grammar-fact. He should have had all his English "why's" explained in terms of grammar. He should have met all the parts of speech and should know their functions, and should also be able to recognize the parts of any type of sentence so as to analyze it without going into minute details.

Punctuation.

At the end of the sixth grade the pupil should be accruate in the ten or a dozen uses of the comma and semicolon that occur in ordinary writing. These are:

- 1. The use of the comma in writing an address and in the formal parts of a letter.
- 2. The comma to separate the clauses of a compound sentence when these are joined by and, but, for, and or and nor.
- 3. The comma to separate words, phrases, or clauses arranged in a series.
- 4. The comma to set off appositives.
- 5. The comma to set off the adverbial clause in a complex sentence when it precedes the main clause.
- 6. The use of commas to set out a semi-parenthetical expression.
- 7. The use of commas to set out non-restrictive clauses.
- 9. The semicolon to separate the clauses of a compound sentence when no conjunction is used.
- 10. The semicolon to separate the parts of a compound sentence joined by a conjunction if either of the parts has a comma within itself.
- 11. The semicolon to separate the parts of a compound sentence whenever one of the conjunctive adverb happens to be the first word of the second clause, and as however, therefore, nevertheless, moreover, etc.

Paragraphs and Whole Compositions.

Beginning in the fifth grade and continuing through the sixth systematic instruction should be given in the construction of simple paragraphs and the arrangement of two to five of these into a logical whole composition. The technical study of the paragraph should not be undertaken at all in the elementary school. All that the elementary school pupil needs to know about a paragraph is that it is a group of sentences arranged in a logical order each sentence of which says something about the one thing of which the paragraph treats.

References.

Brown-How the French Boy Learns to Write, Chapter 3.

Mahoney—Standards in English, pages 4 to 38 and pages 104 to 119.

Sheridan—Speaking and Writing English, pages 1 to 46 and 109 to 120.

Seventh Grade

In the first half of the seventh year the procedure for oral and written English is a continuation of that of the sixth grade. Every class is a language class. Every piece of formal written work is English composition, to be prepared as such and marked as such. The war against speed-faults is kept up with a new catalog of the

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errors of this grade and these individuals. If the teachers in the lower grades have done their duty, there should be pupils in the seventh grade whose place in the account book is a clean page. But with the shifting of the school population, and new pupils coming into each grade, who have not been in the school before, the teacher will find always that the work of correction must go on. She will never need to sigh in vain for other errors to conquer.

Grammar.

The grammar for the first half of the year is incidental, and consists mainly in the rough analysis of sentences to determine what form is correct when the pupils are in doubt about what to say. This should be done over and over, week after week, until each child can test for himself the function of any word, phrase, or clause he is using in his own speaking and writing. This is never the minute hair-splitting and logic chopping of the old grammar, but merely an inquiry into the function of a word, phrase or clause whenever a doubt arises about what to say. For example, shall I say, "Father" expects Mary and I (or Mary and me) to meet him at four o'clock." The objective form is used after a transitive verb. Therefore, I should say "Mary and me."

When the child reaches the second half of the seventh year he should be taught in an ordered series of lessons and in a special period for grammar all the grammar facts that actually assist one in determining how he should speak and write or help him to judge the correctness of what he has already said or written. All these facts have already come to the child incidentally in the grades below the seventh, Here the purpose is to review them through a new intensive teaching of the facts arranged in a logical order. By cutting out every item of grammar except those that function in shaping the child's speech and writing the whole matter can be reduced to an easy half year's work, and it can be taught so that it will actually be **done** and usable when the class finishes the study.

Punctuation.

Insist upon the pupils using the simple working punctuation marks as systematically and accurately as they use their knowledge of capital letters or spelling.

Paragraphs and Whole Compositions.

See the instruction under the Sixth Grade section of this course. References.

Brown-How the French Boy Learns to Write, Chapter 3.

Mahoney-Standards in English, pages 4 to 38 and pages 120 to 135.

Sheridan—Speaking and Writing English, pages 1 to 46 and 120 to 132.

Eighth Grade

The procedure in the eighth grade is the same in all points as in the seventh. In the final third of the year there should be a quick, snappy review of the functional grammar that occupied the last half of the seventh year. No new material is introduced nor any new complexities in the paragraph, punctuation, grammar or anything else. Practice for quality is now the aim.

References.

Brown-How the French Boy Learns to Write, Chapter 3.

Mahoney-Standards in English, pages 4 to 38 and pages 136 to 156.

Sheridan—Speaking and Writing English, pages 1 to 46 and pages 132 to 145.

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General Bibliography

Bonser-The Elementary School Curriculum, Chapter 23. Bolenius—The Teaching of Oral English.

Brown-How the French Boy Learns to Write.

Carpenter and Baker-The Teaching of English in the Elementary and Secondary School.

Chubb-The Teaching of English.

Cooley—Language Teaching in the Grades. Deming—Language Games for all Grades.

Kendall and Mirick-How to Teach the Fundamental Subjects, Chapter 2.

Leifer-Language Work in Elementary Schools.

Mahoney-Standards in English, pages 1 to 40 and pages 177 to 193.

Sheridan-Speaking and Writing English, pages 1 to 50 and pages 144 to 153.

Scales for Measuring Results of English Teaching

- 1. The Nassau County Supplement to the Hillegas Scale, Teachers College Publications, Columbia University, New York.
- The Harvard-Newton Composition Scale. 2.
- 3. Willing's Composition Scale for Measuring Written Composition, Bureau of Educational Research, Urbana, Illinois.
- Charters' Diagnostic Test in Language and Grammar for Pro-nouns, Bureau of Educational Research, Urbana, Illinois. Charters' Diagnostic Language Tects, Bureau of Educational Research, Urbana, Illinois. Starch, Punctuation Scale, University of Wisconsin. Trabue, Language Completion Tests, Teachers College Publica-tions, Columbia University, Mar Yachers 4.
- 5.
- 6.
- 7. tions, Columbia University, New York.

CIVICS*

First Grade

- Aims in teaching: 1.
 - To teach children an appreciation of dependence upon para. ents; what parents do for them.
 - To show children what they can do to help parents and b. others.
 - To teach children to keep clean and well by exercising simple health rules, such as those concerning fresh air, food, c. clothing, exercise, sleep, care of the skin, hair, eyes, teeth, nose and ears.
- Outline of material—The family is the basis for the work, with 2.
 - the following subjects included: a. Duties of parents: love, protection, support, and regulation of the home.
 - Duties of children: love for one another, kindness, respect, h gratitude, good conduct, obedience, honesty, ownership, generosity, loyalty, and patriotism.
 - Health of the family: food, clothing, exercise, sleep, care of C. the eyes and the ears, cleanliness of skin, hair, and teeth.
 - Special community service of the family: war savings d. stamps; recognition of any special interest which may develop.
- Procedure: In the early grades not much time need be given 3. directly to this work. The greater part of it may be accomplished through correlation with other subjects. Talks and stories are the direct efforts.
- Bibliography-Other subjects in the course of study furnish 4. material.
 - Texts for the teacher: a.

Dealey, J. Q., The Family in Its Sociological Aspects.

Gillette, J. M., The Family and Society.

Cabot, E., Ethics for Children.

A Course in Citizenship. Material for grade one. Allen, W. H., Civics and Health.

b. Stories for children; some selections classified:

The Family.

The Fairy Who Came to Our Home, in For the Children's Hour, Bailey.

Little Red Riding Hood.

Why Tony Bear Went to Bed.

Grandfather.

Love.

The Hidden Servants, in Stories to Tell Children, Bryant. The Selfish Giant.

Support.

The Little Red Hen, in Stories to Tell Children, Bryant. Obedience.

Raggylug, in How to Tell Stories to Children, Bryant. Little Half Chick.

Cleanliness.

The Pig Brother, in Stories to Tell Children.

Helpfulness.

Why the Morning Glory Climbs, in How to Tell Stories to Children.

Why the Chimes Rang.

*This outline is taken from "The Teaching of Civics," Edwin B. Smith, Colorado State Teachers College, Greeley, Colorado, Bulletin No. 10.

The Little Hero of Harlem.

Kindness.

Why the Evergreens are Always Green, in Stories to Tell Children.

Wheat Fields, in For the Children's Hour, Bailey. Honesty.

Honest Woodman, in Child's World, Poulsson.

The Boy and the Wolf.

Gratitude.

The Elves and the Shoemaker, in Stories to Tell Children. How Patty Gave Thanks, in Mother Stories, Lindsay. Good Conduct.

The Gingerbread Boy, in Mother Stories.

Patriotism.

Betsy Ross and the First Flag, in For the Children's Hour.

Second Grade

1. Aims in Teaching:

- To help children to appreciate their relations to the several a. social groups
- To show dependence of the individual upon the group. b.
- 2. Outline of material-The general subject is the home studied with relation to:
 - Cleanliness in and about the house: floors, windows, toilet, a. bath, fresh air, garbage, gardens, and yards. Community service for the home: food, clothing, shelter,
 - b. water, electricity, telephone, etc., as suggested by the grocer, milkman, and others.
 - Home service for the community: care of the home and surc. roundings, complying with requirements relative to health and other community relations.
 - Special community service in the home: conservation of food, war savings stamps, liberty bonds, and contributions d. for relief purposes; also any new interest that may develop in the reconstruction.
- Procedure: In this grade the practices of the first grade are 3 continued; that is, the subject is taught largely through correlation with other subjects. Talks and stories are contined.
- 4. Bibliography.

Texts for the teacher: a.

Allen, W. H., Civics and Health.

Cabot, E. L., A Course in Citizenship.

-Ethics for Children.-

Dunn, A. W., Community Civics.

(See Bibliography in Grade I.)

b. Stories for children:

The Home.

How the Home Was Built, in Mother Stories, Lindsay. The Little Gray Grandmother, in For the Children's Hour. Bailey.

Helpfulness.

How the Crickets Brought Good Fortune.

The Stone in the Road.

The Cock, the Mouse and the Little Red Hen.

The Little Brown Lady.

Generosity.

The Story of Midas, in Stories to Tell Children, Bryant. The Little Boy Who Had a Picnic. The Little Old Man and His Gold.

The King of the Golden River.

Love for Animals.

Hiawatha's Childhood, Longfellow.

Dick Whittington and His Cat, in Tell Me Another Story, Bailey.

Selfishness.

The Queer Little Baker Man, in Stories Children Need, Bailey.

The Cooky.

The Legend of the Woodpecker, in For the Children's Hour.

The Coming of the King.

Bravery.

The Eyes of the King, in Story Telling Time, Bailey. Patriotism.

How Cedric Became a Knight, in For the Children's Hour. Little George Washington.

Co-operation.

How Nice It Would Be, in Stories That Children Need. The Story of the Pink Rose, in How to Tell Stories to Children.

The Old Woman and Her Pig.

Third Grade

- 1. Aims in Teaching:
 - To create an appreciation of what the school does for the a. child; to stir in the child an appreciation of the values of cooperation, mutual service, and community interest.
 - To meate good citizens through instilling proper regard for b. the neighborhood; to encourage a desire to improve the community.
- Outline of material-The school and the neighborhood are con-2. sidered with respect to the following:
 - The school: purpose, buildings, rules governing, sanitation, exercise and play. a.
 - The neighborhood; traffic regulations, street cleaning, reb. moval of garbage, lighting, parks, occupations and industries of the community.
 - The school and the community: thrift campaigns, liberty c. bonds, conservation of food, military education, occupations in the community concerned with the reconstruction interests.
- 3. Procedure: The work may be given indirectly by correlating with other subjects; it may receive attention directly through some periods being given to it each week. Talks and stories may be continued.

Observation and excursions.

- 4. Bibliography.
 - Texts for the teacher: a. City Laws and Ordinances. Gulick, L. H., Town and City. Allen, W. H., Civics and Health. Ayres, M., Williams, J. F., and Wood, T. D., Healthful Schools. Dunn, A. W., Community Civics. Beard, C. A., American City Government. Howe, F., The Modern City and Its Problems. United States Bureau of Education Bulletin No. 17, 1917. Civic Education in Elementary Schools. b. Stories for children: (See bibliography in Grade II.)

- 1. Aims in Teaching:
 - a. To show the service which the city renders the citizen.
 - b. To make clear the value and the necessity for cooperation of the citizens in furthering the welfare of the community.
- 2 Outline of material-The life in the community and some of the problems associated with the home:
 - a. Food supply: markets, dairies, prices, and inspection.
 - b. Water supply: source of supply, purity, and cost.
 - Housing: building laws, lighting, cleanliness, ventilation, C. sewerage, gas, and electricity.
 - Fire protection: fire company, fire escape, origin of fires, d. and prevention of fires.
 - Police department: duties of the policemen, relation of the e. citizen to the policeman.
 - Health department: inspection of supplies, quarantine, eduf. cation of the public.
 - Community activities affecting the home: increase in cost of 'g'. living due to the war, the food supply as affected by the war, the changing source of supply, limitations on the quantity of food available. The subjects mentioned in the other grades may be continued.
- 3. Procedure: The practice still may be largely indirect. Correlation with other subjects aids. The more direct teaching of the subject may be practiced. Contact with the various inter-ests of the community should be held by trips to invertigate them.
- 4. Bibliography.

City Laws and Ordinances. Gulick, L. H., Town and City. Allen, W. H., Civics and Health. Denison, E., Helping School Children. Hughes, R. O., Community Civics. (See Bibliography for Grade III).

Fifth Grade

- 1. Aims in Teaching:
 - To help the children appreciate themselves members of the a. political groups that do work for them.
 - To encourage a community interest in keeping the streets, b. the school yard, and the neighborhood generally clean.
 - To teach the children to appreciate the purpose of the police. c.
 - To show the children how they may cooperate with the fire d. department in preventing fires.
 - To show the children that there are various ways of coe. operating with and sacrificing for the good of the community, which means in reality the good of the individual citizen.
- 2. Outline of material-Life in the community outside of the home, with some of its relations; such as:
 - The cleanliness of the streets: means for cleaning the streets a. -sweeping, hose flushing, vacuum cleaning; removing
 - sweeping, nose fushing, vacuum creaming, removing ashes, garbage, and snow; and the disposal of waste.
 b. Protection by the police department: duties of the department—protecting life and property, prevention of crime, regulation of traffic, keeping order; attitude of the citizens toward the police; and the protection which is desirable.
 - Fire protection: equipment, members of the department, finances, cooperation of the citizens-fire prevention; fire c. alarm boxes and hydrants; fire drills in schools.

- d. Recreation and community improvement: parks-location, uses, support: playgrounds, schoolyards, gymnasiums, theater and moving pictures, and concerts for the public.
- Current community activities: previously mentioned intere.
- ests may be continued. Procedure: While much of the interest of the civics work in 3. this grade finds expression incidentally, more time should be given to direct teaching of the principles of good citizenship.
- Bibliography. 4.

United States Bureau of Education, Bulletin No. 23, 1915, The Teaching of Community Civics.

Department of Public Instruction, Colorado, War-modified Course of Study.

Gulick, L. H., Town and City. Field, J., and Nearing, S., Community Civics.

Hughes, R. O., Community Civics.

Beard, C. A., American City Government.

Sixth Grade

- 1. Aims in Teaching:
 - To teach the forms of government, its agencies and func-2 tions.
 - To show children how the government serves community b. interests and the interests of the children; and how the government is dependent upon individuals in promoting its best interests and operation.
- Outline of material-The work of the grade centers around the 2. necessity for government, the relations between government and the citizen, and the government of the local community.
 - As a preparation for understanding government, consider a. the government in the home, the school, the playground, and the clubs.
 - The privilege of voting and its responsibilities; methods of b. voting in the past and at present; majority rule and political parties.
 - Services of the community to the citizen through the organic. zation of the city, the state, and the nation:
 - The local community serves the citizen by providing (1)for protection of health, care of property, and education.
 - The state serves the citizen by aiding in the construc-(2)tion of roads, by controlling the use of alcoholic liquors, and by providing for general education.
 - The nation serves the individual by carrying the mails, (3)by operating the railroads and telegraphs, and by providing for the rights of citizenship.
 - The duties of the citizen to the communities which serve d. him: obedience to law, honest voting, payment of taxes as provided by law, and response to any call of the community for service.
 - Organization of the local government. e.
 - Services of the local government for the citizen. f.
 - Comparison of local government with other forms of govg. ernment: The commission form of government of cities, the city manager type, European government for cities (some type forms.
 - h. Special organizations within the city to meet temporary

needs such as the council of defense, the food administration, the home service section of the Red Cross, etc.

- 3. Procedure: In this grade as in the preceding one, the work is done by means of formal study of problems; it is also accomplished by observation and investigation by the children themselves.
- Bibliography. City Charter, Laws and Ordinances. Gulick, L. H., Town and City. Munro, W. B., The Government of European Cities. Dunn, A. W., Community Civics. (See bibliographies for grades IV and V).

Seventh Grade

- 1. Aims in Teaching:
 - a. To show the relation of the local government to the state.
 - b. To teach an appreciation of the relations of the individual citizen to the state government.
- 2. Outline of material—The general subject is the people living under state government.
 - a. The government of Colorado.
 - (1) Division of powers between state and local government; county government and city government.
 - (2) The suffrage.
 - (3) Political parties and party platforms.
 - (4) Conduct of elections.
 - (5) The departments of government and the relations of the citizen to them.
 - (6) Direct participation of the people in government as expressed by the initiative, referendum, recall, and recall of judicial decisions.
 - (7) The place of public opinion.
 - (8) Education provided by the state.
 - b. Services of the state for the citizen: protection and liberty freedom of speech and of religion, good roads, care of health provision for education, and industrial and social legislation.
 - c. Obligation of the citizen toward the state: financial support, respect for laws, intelligent interest in the issues effecting the interests of the people of the state, earning an honest living, and the care of one's health.
 - d. Special organizations within the state to meet temporary needs, such as the state council of defense, food administration, state constabulary, etc.
- 3. Procedure: The work of the year centers around problems whose solution cultivates the civic qualities in children which are desired in citizens.
- Bibliography. Hughes, R. O., Community Civics (excellent text for the grade). Hatch, D. R., Civil Government of Colorado, 1917 edition; Statutes of Colorado. Material published by the state government: Reports of bureaus and commissions, reports of departments, etc. Holcombe, A. N., State Government in the United States. A college text of value for the teacher.

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In adjusting his life to his physical environment man has accumulated much knowledge about the resources and conditions of the earth which make them of most use to him. Progress has depended much upon the adjustment man has made to these earth controls. Geography is made up of this useful body of experience in discovering the resources of the earth and in discovering and inventing way to use them.

In the geography for the elementary school, selection is necessarily limited to those elements most useful in understanding our relationships to the various regions of the earth and to the peoples of those regions.

The earth contains a wealth of natural resources, but it imposes certain unchangeable conditions under which these resources may be made available. Man must discover these resources and adjust himself to the conditions under which they may be used before he can benefit by them. He finds coal in some regions; he mines it and distributes it as it is needed. Cotton grows well in some regions only; enough must be grown in these regions to supply the needs of all. Some climates are cold; man adjusts himself to their rigor by the use of proper food, clothing, and shelter. Rainfall is insufficient for agriculture in some regions; man resorts to irrigation and reclaims some of these regions. Routes of travel follow waterways or land formations offering least resistance. People make their home where conditions offer the most favorable opportunities for living. The surplus produced in one region is exchanged for the surplus different in kind from other regions. To some regions many people are attracted by climatic conditions or by the properties of water particularly favorable to health. Numerous mountains, gorges, waterfalls, forests, and other land and water forms are visited because of their peculiar beauty or grandeur or other unusual character. Everywhere man's life is a response to the controls of climate, distance, and possibilities of exchange and travel, determined by the very nature of the earth. Geography furnishes us the results of man's experience in making these responses or adjustments. For the elementary school, those elements must be selected which most clearly have to do with the everyday life needs of all.

THE USES OF GEOGRAPHY-

Th study of geography yields two kinds of information, practical and interpretative.

Practical knowledge as applied to agriculture, mining, and industries using immediately available raw materials, has to do with local resources, climatic controls, and market facilities. For trade and transportation the practical knowledge required is that of sources of surplus raw materials, centers of industrial production, markets, trade customs, and routes and conditions of transportation. For travel as recreation the practical knowledge needed is that of interesting features of climate, land and water forms, plant and animals life, and of the life and work of peoples of different regions of the earth. Such information is called practical because it is directly helpful in determining the action of those engaged in any of those pursuits of business or pleasure.

Interpretative knowledge is that which provides an understanding of the dependence of man upon earth resources and the relationships among peoples in making these resources available. All of that information which is practical is at the same time interpretative. But there is much contributed by geography study which is not directly practical in the sense in which the term is here used. Such studies include information concerning the sources of the various products which we use but do not produce, the routes of travel by which they come to us, the markets to which our surplus products go and the routes by which they go, the earth conditions which make these differences in production and which determine methods of transportation, and the life conditions, occupations, recreations and characteristics of the peoples living in those regions distant from us yet related to us by exchange of products and often in many other ways. Interpretative values lie also in knowledge of the earth controls that have determined much in the acts of historic peoples who have contributed to the development of the race and through which we are helped to understand the life currents of our own time. All interpretative knowledge is social in character, helping us to a fuller appreciation of human interdependence. Geography helps us to realize how we ourselves are living more comfortably and happily because of the products we receive from the work of others in all parts of the world, and how our products in turn are useful to many of them. Not only is this true of material commodities of exchange, but also of much in music, art, literature, and other forms of recreation which we interchange.

Third Grade

The purpose of the study of geography in the Third Grade is to arouse in the child an interest in people and things and to develop a consciousness of inter-dependencies and relationship, of communities upon one another and to give the children experiences to serve as a foundation to build upon in later grades rather than to teach specified geographical facts. The history is so interwoven with the geography that the geography furnishes the background of the history work and community civics that is given.

(In correlation with Nature Study)

I. Study of

- A. Local weather conditions.
- B. Incidental work on wind, temperature, length of day.

1.

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- Making of weather charts. С.
- Study of II.
 - A. Directions.

Use of globes and maps to locate places. B.

- Land and water masses. С.
- Mountains, valleys, plains, plateaus, deserts. D.
- E. Rivers.

a.

III. Study of Colorado.

A. Location.

- B. Characteristic features.
 - Surface. 1.
 - Mountains.
 - 1. Rocky Mts.
 - 2. Pikes Peak.
 - 3. Longs Peak.
 - 4. Mt. Holy Cross.
 - Canyons, gorges. b.
 - Valleys. c.
 - 1. San Luis
 - Deserts. d.
 - 1. Colorado.
 - Plains. e.
 - f. Plateau.
 - Continental Divide. g.
 - Rivers. h.
- C. Industries.
 - a.
 - b. Sugar beet industry.
 - Fruit raising. c.
 - d. Mining.
 - Manufacturing. e.'
 - Stock raising. f.

- Problem Method of Attack.
- Little Journeys to
- a. Pikes Peak. b. Longs Peak.
- c. Mt. Holy Cross. d. San Luis Valley.
- 2. By means of b. Pictures.
 - a. Sand table.
 - c. Post Cards.
 - d. Projectoscope.
 - e. Stereoptican.
 - f. Lantern.
 - Problem Method of Attack.
- Agriculture.1.Life of a Dry Farmer.1.Irrigated farming.2.Life on an irrigated farm.2.Dry farming.3.Life in a mining camp.

 - 4. Life of a cow-boy.

- 1. . Cattle.
- Sheep. 2.
- 3. Hogs.
- 4. Goats.
- Fish hatchery. g.

V. Means of Transportation.

- A. Old Trails.
 - Santa Fe. a.
 - Major Longs. b.
 - "Switzerland Trail". c. Trail between Ft.
 - d.
 - Union & Ft. Laramie
- Railroads. **B**.
- VI. Important Cities.
- Summer Resorts and Health Resorts. VII.
 - Rocky Mt.National Park. Α.
 - Β. Estes Park.
 - C. Colorado Springs.
 - D. Manitou.
 - E. Place Sanitarium (Boulder).
 - F. Pagosa Springs.
 - G. Idaho Springs.
 - H. Mineral Springs.
 - I. Soda Springs.
 - Hot Springs. J.
 - Cottonwood.
 - Poucha.
 - Princeton.
 - Ward and Eldom. **K**.

Use of the sand table, maps, small globes, large globes, folders, pamphlets, reference books and stories, lantern slides, pictures, post cards and field trips will be important in teaching the geography.

The excursion, field trips, pictures and stereoptican lantern and projectoscope will be the means of presenting the subject matter.

Fourth Grade

Beginning with the home state of the child the work is extended to its neighboring states and section, then to the Pacific section the southern section, Central States, Middle States and then New England States, thus giving the child a general knowledge of the United States. This work is developed through studying the industrial, social, civic and political conditions in each section. Conditions are created so as to stimulate the child's thinking by the problem method of attack, as for example, ("How is it possible for the United States to send so much wheat to other countries?") from which the subject is developed.

Plateau States

- Surface and General Appearance. I.
 - Characteristic features.
 - 1. Mountains and Plains.
 - 2. Mountain streams, rivers, lakes.
 - 3. National Parks, forest reserves, canyons, etc.
 - Soil. B.
- Climate. II.

Α.

- A. Distinctive features.
- 1. Altitude-atmosphere. Β. Weather.
 - 1. Rainfall.
 - Sunshine. 2.
- West compared with East. C.
- D. Health resorts.

Problem Method of Attack. 1. Same as under III. (Study of Colorado)

Problem Method of Attack. Why these places are desirable summer and health resorts. How to get to these places.

Problem Method of Attack.

- How did the climate impress the 1. settlers?
- 2. How does the climate impress tourists of today?

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III. Plant and Animal Life.

(correlation with Nature Study)

- A. Plant.
 - Grasses, cactus, sage-brush, russian thistle, 1. Planning a hunting trip. 1. etc.
 - 2. Common flowers.
- R Animal life.
 - 1. Common animals, Prairie dog-etc.
 - 2. Wild life in the mountains, Mountain sheep, antelope, bear, etc.
 - 3. Common birds-magpie, house finch, mountain blue jay, grosbeak, etc.
- IV. Population.
 - A. Census statistics.
 - B. People.
 - 1. Natives—Indian tribes.
 - a. Pueblo Indians.

1.

3.

etc.

literature).

Brighton.

of Fort Lupton

- 3. White settlers-from the East.
- V. Industries
- A. Agriculture
 - 1. Irrigation and dry farming 2.
 - 2. Sugar beet
 - 3. Potato

 - 4. Beans—peas B. Fruit raising

 - C. Cattle raising D. Sheep raising
 - E. Mining
 - F. Smelting
 - G. Granite industry
 - H. Cement making
 - I. Salt mining
 - J. Manufacturing

- K. Fish hatchery
- L. Canning vegetables M. Pickle industry
- N. Marketing
 - **Rocky Mountain Section and Pacific Section**
- VI. Railroads I. Surface

 - 2. Coast ranges—Cascade
 - 3. Great Valleys Yosemite

Problem Method of Attack

- A. Characteristic features 1. A trip over the Royal Gorge 1. Mountain ranges—Sierra N.2. Mountain Passes, Platte Canon, etc.
 - 3. The building of the Union Pacific
 - -76-

- 2. Laws protecting wild animals.
- - Problem Method of Attack.
 - 1. The early settlement of Denver, Colo. Springs, Pueblo, Greeley.

The advantages of irrigation.

What are the advantages of sugar beet industry in Greeley?

To what points are most of the

Greeley potatoes shipped?

Tungsten—Study of Nederlands Coal—Study of Trinidad Radium—Study of Vanadium (The Chamber of Commerce in

each of these towns will gladly send

Pottery-Study of Colorado Springs Condensed and Malted Milk-Study

Gold—Study of Cripple Creek

Cement—Study of Portland Sugar—Study of Greeley and

Flour-Study of Longmont

Silver-Study of Aspen Lead-Study of Leadville

2. Why did the early settlers select these places?

Problem Method of Attack

- b. Sioux, Cheyenne, Comanches, Arapahoes, Kiowas.
- 2. Foreign elements-mining districts, sugar beet districts,

Real Parts

San Luis San Joaquin Willamette

3. Plateaus

Crater Lakes 4.

5. Rivers

- Problem Method of Attack
- 1. A trip to these various points of interest.
- Follow same method as suggest-2. ed in Third Grade under III. (Study of Colorado)
- B. Comparison with Pacific Slope
- II. Climate
 - A. Altitude

 - Contrast-Mildness of climate of Pacific Section with Rocky Mountain Section.

III. Industries

- A. Fruit raising 1. In California
 - San Joaquin Valley Southern California Salt River Valley, Arizona
- Contrast with Florida and 2. Colorado
 - B. Lumbering
 - C. Agriculture

Cotton, etc. Gold

D.

Silver

Lead

E. Fish Industry

Catalina Island Fish

Salmon-Columbia River

- F. Seaweeds-Kelp
- G. Manufacturing
 - Condensed Milk
 - Lumber
 - Flour
- H. Irrigati I. Smelting Irrigation
- J. Commerce

Spanish Missions

- A. Where located
 - (See Histroy outline)

Central States

- I. Surface and Central Appearance Α.
 - Characteristic features
 - 1. Rivers, Great
 - Lakes
 - Plains, Prairies, 2. uplands
 - 3. Forests
 - 4. Soil

- 4. How does the scenery along the U. P. compare with the other Railroads in Colorado?

- C. Density of forests—forest reserves.
- - B. Rain falls and temperature
 - Problem Method of Attack
 - 1. A trip to a Fruit Ranch
 - Why is Calif. called the Fruit basket of the United States? 2.

 - 3. Lumber Camp life
 - 4. Man's relation to soil and minerals.
 - 5. Life of a salmon fisherman.
 - 6. Comparison with local industries.

- Problem Method of Attack
 - 1. Advantages and disadvantages over these of the western states. 2.
 - Relation of man to land forms. 3. Relation of man to climatic con-
 - ditions.
 - 4. Relation of man to vegetation and animal forms.

- IV.
 - - - History of them taken in history work. Β.

Wheat

IL Climate

> **Distinctive** features Α.

> > 1. Altitude-atmosphere

- Weather Β.
 - 1. Rainfall 2 Sunshine
- C. Compare with West D.
 - Summer Resorts

III. Plant and Animal Life (Correlate with Nature Study)

- A. Plants
 - 1. Grasses-weeds that are a pest, as the Canadian thistle.
 - 2 Common wild flowers
- **B**. Animal life
 - 1. Common animals

IV. Industries

- A. Agriculture Grains
 - Cotton growing Tobacco
 - Truck farming
- Β. Fruit raising
 - 1. Apples, berries,
 - peaches, pears
 - cherries, etc.
- C. Dairying butter
 - cheese
- D. Lumbering
- E. Meat Packing
- F. Mining-Iron, copper, petroleum, natural gas, lead, zinc, coal.
- G. Quarrying
- H. Manufacturing
 - 1. Lumber
 - 2. Flour
 - 3. Iron, steel
 - 4. Furniture
 - 5. Leather
 - 6. Cement

I. Commerce

1. Transportation V. Important Cities

Problem Method of Attack

Stury of Minneapolis and St. Paul Study of Duluth

- Study of Grand Rapids

Problem Method of Attack

- 1. Life of a Sailor on the Great Lakes.
- Life in Chicago, Detroit, Milwaukee, St. Louis.

1. Comparison with Rocky Mts.— Advantages and disadvantages.

Middle Atlantic

- Ι. Location and position of States
 - A. Boundaries
- II. Surface and General Appearance
 - A. Mountains
 - 1. Adirondacks
 - Appalachian 2.
 - a. White Mts.
 - b. Green Mts.
 - c. Blue Ridge
 - d. Great Smoky Mts.
 - Plains, plateaus, hills, Comparison with plateaus in the **B**. valleys Rocky Mountains.
 - 1. Coastal plain 2.
 - Piedmont Belt

Problem Method of Attack

- Problem Method of Attack 1.
 - Life on a Corn Farm in the Mid-
 - dle West.
 - 2. Life on a Wheat Farm in Kansas
 - Life on a Dairy Farm in Wis-3. consin
 - Life on a Fruit Farm in Michi-4. gan

- 3. Delaware Water Gap 3. Relation of man
- 4. Mohawk Valley
- 5. Hudson Valley
- C. Forests
- D. Coastline
- Rivers, lakes, bays, water-E.
 - falls and rapids
 - 1. Connecticut, Merrimac Penobscot, St. Lawrence, Hudson, Alleghany and Susquehanna rivers, etc.
 - 2. Lakes Erie and Ontario
 - 3. Lake Champlain and many smaller lakes.
 - 4. Chesapeake Bay 5. Comparison with bays of the West.
 - 5. Delaware Bay
 - 6. Massachusetts
 - -Boston Harbor
 - 7. New York Bay
 - and Harbor
 - 8: Long Island Sound
 - 9. Many good Harbors along the coast.
 - Ocean
 - 1. Atlantic
- G. Soil

III. Climate

F.

- A. Rainfall
- Snows B.
- C. Severe Winters, mild
- summers
- D. Temperature
- **Characteristic Products** IV.
 - A. Grains
 - Β. Fruits
 - 1. Berries and small
 - fruits (cranberries)
 - 2. Orchard fruits Problem Method of Attack
 - 3. Grapes
- 1. Life of an Oyster Farmer on Chesepeake Bay 2.
 - Life of a Coal Miner in the Middle States

- C. Fish
 - 1. Oyster, cod, mackerel, etc.
- D. Cattle, sheep
- E. Minerals
 - 1. Coal, natural gas,
 - petroleum
 - 2. Stone
 - a. Marble
 - b. Granite
 - c. Limestone.
 - standstone
 - and slate
 - 3. Salt and Sypsum
- V. Industries
 - A. Manufasturing
 - Β. Agriculture

 - Farming
 Fruit raising
 - С. Fishing
 - D. Quarrying
 - E. Mining

- Problem Method of Attack in a study of New England.
- 1. Life in the Maine Woods
- 2. Life of a Fisherman at Glouster, New Foundland
- 3. Life in a Maple Sugar Camp
- 4. Life in a Cotton Mill
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to land forms.

- 1. Comparison with climate of the West. Advantages and disadvantages.
- Problem Method of Attack

- F. Lumbering
- G. Paper Making
- H. Commerce
- 5. Life in a Woolen Mill
- 6. Life of a Granite Quarryman

7. Life in a Munition Works

VI. Educational and Musical Centers

- A. New York City
- B. Massachusetts
 - 1. Boston
 - 2. Cambridge

VII. Summer Resorts

VIII. Important Cities

Problem Method of Attack

How do these compare with those of the West? 1.

Project Method of Attack

1. Life in New York City, Buffalo, Boston, Baltimore, Pittsburgh, Philadelphia and Washington.

(Note)-Use of stereoptican lantern, field trips and excursions, sand table charts, maps ond other apparatus furnish opportunity for working out projects.

GEOGRAPHY (Climatology) **Fifth Grade**

The purpose of teaching by climatic provinces is purely to save time. If once we know the products of the California climate in California, our pupils have a rich background of information to draw upon when we tell them Italy has a Californian climate or Central Chile has a California climate. We may use a little more time just at the moment to get this climatic background, but we save half the time we otherwise would spend in the study of the other continents if we took them up as disconnected units. See outline page.

The industrial and commercial geography of North America and the West Indies based on climate.

I. Climates

Coloradoan Polar Mexican 1. Man's	lethod of Attack
Arivonian Oregonian Caribbean 2. Climat	relation to climate.
Californian Mississippian Alaskan	e and Human energy

Temperature and rainfall graphs to be made for each climate illustrating type conditions. The following points to be worked out in detail while making a stdy of each climate.

- 1. Location of climatic regions to be studied on outline map of North America. (Individual maps to be made)
- 2. Description of climate
- 3. Vegetation
- 4. Animals
- 5. Industries
- 6. Products
- 7. People
- 8. Trade
- Cities 9.

Problem Method of Attack

- 1. The relation of man to the phy-
- sical environment and climate. 2. The relation of man to the soil
- and minerals.

II. Physical Features 1. Highlands

- 3. The relation of man to land forms.
- a Prevailing
- Westerlies
- h. Tropical calms
- c. Trade winds
- d. Land and sea
- breezes
- Lowlands 2
- Work of streams 3.
- Winds 4.
- Glaciation 5.

Note-The use of products Map on Climate Map. Abundant Pictures from National Geographic Magazines and Pan American Union.

Pictures to show life in each typical climate.

Use of Greenhouse and Museum Specimens.

Bibliography—Human Geography, Book I, Smith, Winston Co. Brigham—McFarland, Book II, American Book Co. New Geography, Book II, Tarr & McMurry-MacMillan.

- Chamberlain's Geographical Readers, Ginn & Co. Frye-Atwood New Geography, Book II, Ginn & Co.

Carpenter's Readers on Commerce and Industry-A. B. C.

How the world is fed. 1.

How the world is clothed. 2

How the world is housed. 3

Commercial and Industrial Geography by Keller and Bishop. Ginn & Co.

Geography af Commerce and Industry by Rochelean. The Companion Series.

1.

Our Country East. Our Country West. 2.

The United States-Winslow.

Industries of Today-The Youth's Companion Series.

Geographic News Bulletin-U. S. Bureau of Education.

Sixth Grade

South America

Climatology Α.

- 1. Caribbean
 - 2. Mexican
- 3. Coloradian
 - 4. Californian
 - 5. Nevadan
- Human Geography Β. 1.
 - Indians
 - a. Physical

 - c. Religion and

- Amazonian 7. Arizonian
- 9. Oregonian
- 10. Alaskan

Problem Method of Attack

6.

- 1. Present relation between white man and Indian.
- b. Traits
- homelife.
- Present day racial distribution 2.
 - a. Negro
 - b. Indian
 - c. Mediterranean
- C. Comparison of Climate and People
- Industries and Commerce D.
 - A study by country, famialarize the child with occupations and products of South America

Problem Method of Attack

- 1. Our exports and imports to South America.
 - 2. Comparison with occupations and products of North America.

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- characteristics
- Floridan 8.

Europe

- Α. Climatology
 - 1. Polar
 - 2. Alaskan
 - 3. Oregonian
- B. Human Geography Races
- a. Nordic
- b. Alpine
- c. Mixed races
- d. Mongolian
- e. Mediterranean

- 4. Mississippian

- 5. Canadian
- 6. Nevadan
- B. Human Geography

Problem Method of Attack

- What makes a difference in 1 races.
- What does each contribute to 2. the world.
- C. Comparison of Climate and People

Problem Method of Attack

- 1. Industries and Commerce Study by country to familiarize child with habits of people, industries and products
- Our exports to Europe of raw material and finished products. 1. Scenic and historic interests. 2. 3. Comparison of European occu-
- pations and standards of living with United States.

Bibliography

Textbooks:	
Human Geography, Book I-Smith	John C. Winston
Brigham-McFarlane, Book II	
Tarr-McMurry, Book II	Macmillan Company
Carpenter's Geographical Reader	
New Geography, Book II-Frye-Atwood	Ginn & Company
Little Journey Series-F. J. Koch	A. Flanagan Co.
Peeps at Many Lands-Eliz. Greirson	
Our Little Cousin Series-M. H. Wade	Page Co., Boston
Under Sunny Skies-M. A. L. Lane	Ginn & Company
Toward The Rising Sun-M. A. L. Lane	Ginn & Company
Northern Europe-M. A. L. Lane	Ginn & Company
The Wide World-M. A. L. Lane	Ginn & Company
Strange Lands Near Home-M. A. L. Lane	Ginn & Company
Winslow Geography Readers.	Heath Company
Geographic News Bulletin	United States Educational

Seventh Grade

Climatology

- The following climates are to be studied in full: Nevadan, Coloradoan, Arizonian, Californian, Canadian, Polar, Oregon, A. Floridan, Mississippian, Mexican, Caribbean, Amazonian, Alaskan.
- Suggestive Outline. Β.
 - Location 1.
 - Characteristics 2.
 - 3. Causes
 - Physical Features 4.
 - 5. Vegetation
 - 6. Animals
 - Industries 7.
 - Important Cities-8 Reasons for location 6. and size.
 - Effect on the people. 8. 9. 9.

Problem Method of Attack

- Take a trip around the world on the 40 parallel of North latitude,
 - noting in relation to it:
- 1. The dense population areas.
- The race types predominating. 2.
- 3. The large cities. 4.
 - Main sorts of industries.
- Trade routes across. 5.
 - The superior plant crops.
 - Mineral deposits.
 - Changes in time.
 - Variations in climate, with causes for same.

- Excursions С.
 - A visit to the college greenhouse. 1.
 - Excursions on the campus to study shrubs and trees. 2.
 - A visit to the museum. 3.

7.

D. Climate Maps

E. Rainfall and temperature graphs.

Asia, Australia and the Islands of the Pacific

A. Climatology

Problem Method of Attack

- B.
- Human Geography 1. Climate and human energy. A study of the most im- 2. International relations.
- C. portant countries with reference to people and industries.

Africa

C.

- Climatology A.
- Problem Method of Attack
- A. ClimatologyProblem Method of AttackB. Human Geography1. Climate and human energy.
 - A study of the most im- 2. Man's relation to man.
 - portant and interesting 3. Why is Africa called "the dark countries continent."

Physical geography (Based on Dodge's "Reader in Physical Geography." A. Origin of Land forms.

- 1. Changes in the earth's
 - crust.
- 2. Work of the atmosphere.
- 3. Work of running water.

Great land forms. R

1

- Mountains: a. building
- of, b. causes, c. kinds,
- d. ageing.
- 2. Volcanoes: a. shapes, b.

kinds, c. ageing.

C. Earthquakes.

Gevsers and Hot Springs. D.

Movements of land. E.

F. Soils.

- form and motion.
- 2. Human activities in mountains and plains.

Bibliography

Frye-Atwood-New Geography.

Brigham and McFarlane-Essentials of Geography.

J. Russel Smith-Human Geography, Book I and II.

Carpenter—Asia. Carpenter—Africa. Carpenter—Australia.

Stanley—In Darkest Africa. Redway—All around Asia.

Stoddord's Lectures. Winslow—United States. Winslow—America's Neighbors. Winslow—Distant Countries.

Carpenter—How the World is Fed. Carpenter—How the World is Clothed.

Carpenter-How the World is Housed.

Dodge-A Reader of Physical Geography.

Herbertson-Man and His Work.

Hardy-Plant Geography.

Newbegen-Animal Geography.

Allen-Industrial Studies.

Geographic News Bulletin-U. S. Bureau of Education.

- 1. The effect on man of the earth's
- Problem Method of Attack.

Outline of Climatology*

Desert

Arizonian Climate.

A. Characteristics.

1. Hot summer. 2. Mild winter.

3. Always dry.

Rainfall. Yuma, Arizona.

Jan: Feb: Mar: Apr: May: Jun: Jul: Aug: Sept: Oct; Nov; Dec. 0.2: 0.3: 0.2: 0.1: trace 0.1: 0.2: 0.1: 0.2: 0.2: 0.2.

Temperature.

52: 60: 62: 70: 79: 83: 91: 90: 85: 73; 62: 56. B. Causes.

- 1. Mountains on west.
- 2. Land on south and east.
- 3. Distance from ocean.
- Physical Features. С.
 - 1. Mountains.
 - Rocky Mountains.
 - 2 Rivers.
 - Colorado.

Gila

Rio Grande.

3. Deserts.

Mohave, Colorado, and Painted. D. Characteristic Products.

1. Natural products.

a. Mineral salts-salt, soda, borax.

b. Sage brush and desert grass.

Cacti.

Manner in which desert plants protect themselves.

Under irrigation. 2

- a. Grains-wheat and corn.
- b. Alfalfa.
- Cattle and sheep. c.
- d. Fruit.
- Tropical plants-cotton, date palm. e.
- E. Industries.
 - Agriculture. 1.
 - 2. Ranching.
 - 3. Mining.
- F. Important Cities.
 - 1. Santa Fe.
 - 2. Phoenix.
 - 3. Bishee
 - 4. El Paso.
- G. Scenic Wonders.
 - 1. Grand Canyon of the Colorado.
 - 2. Petrified Forest.
 - 3. Painted Desert.
 - Indian life and Ancient Ruins. 4.
- Η. People of the desert. 1.
 - Indians.
 - a. Navajo.
 - Pueblo. h.
 - Compare and contrast:
 - 1. Homes and food.
 - 2. Forms of agriculture.
 - Rug and basket weaving. 3.
 - 4. Pottery making.
 - 5. Legends.

*This outline prepared by Professor George Barker, Department of Geography, Colorado State Teachers College.

- Arizonian Climate in Other Lands. I.
 - South America. 1.
 - Peru. 8
 - Contrast the life and civilization of the Inca with that of the Navajo and Pueblo.
 - Africa. 2.
 - South west coast. 2.
 - b. Sahara Desert.
 - Life in this desert compared to that in the other places.
 - The Pyramids and Sphinx.
 - Asia. 3.
 - a. Asia Minor and the interior of Arabia.
 - b. Desert of Gobi in China.
 - Indo China. c.
 - Compare and contrast desert life in this region to desert dwellers elsewhere.
 - Australia. 4.
 - Great western half. a.
 - Animal life in Australia.

Compare and contrast plant and animal life in all desert regions.

Floridan Climate.

A. Characteristics.

- 1. Even temperature.
- 2. Much rainfall. 3. Semi-tropical.
- Rainfall-Miami, Florida.

Jan: Feb: Mar: Apr: May: Jun: Jul: Aug: Sept: Oct; Nov; Dec. 4 : 2.6: 3 : 3.7: 4.5: 8.3: 7.3: 5.4: 9.2: 7.2; 2 ; 1 ;

Oceanic

Temperature.

65: 67: 71: 74: 76: 81: 82: 82: 81: 78: 74: 69. R Causes.

- 1. Nearness to ocean.
- In trade wind belt. 2
- Physical Features. С.
 - Ocean. 1.
 - Atlantic. a.
 - Gulf of Mexico. h.
 - 2. Rivers.
 - Mississippi. a.
 - Alabama. b.
 - Chattahoochee. c.
 - d. Savannah.
 - Bays and Harbors. 3.
 - a. Galveston Bay.
 - b. Mobile Bay.
 - c. Tampa.
- Characteristic Products. D.
 - 1. Cotton.
 - 2. Fruit.

 - a. Grapefruit, orange, lemon.b. Pineapple and other tropical fruit.
 - 3. Forests.
 - a. Southern Pine.
 - 4. Sugar cane.
 - Rice. 5.
 - 6. Sponges.
- E. Industries.
 - 1. Agriculture.
 - a. Plantation.

Cotton. Sugar. Tobacco.

- b. Turpentine.
- Orchards. c.
- Vegetable gardening. d.
- 2. Lumbering.
- 3. Manufacturing.
 - a. Cotton.
 - Cloth.
 - Cotton seed oil and other bi-products.
 - b. Sugar and bi-products.
- Fishing. 4.
- 5. Commerce.
 - Importance of Mississippi River in trade with South a. American countries.

F. Important Cities.

- New Orleans-Manufacturing center; doorway to inter-1. ior; centrally situated to South America.
- 2. Mobile-Shipping center.
- 3. Savannah.

Seaports shipping cotton, lumber, etc.

- 4. Charleston.
- Galveston-Seaport shipping cotton etc., outlet for goods 5. from west.
- 6. Palm Beach and Miami-Famous winter resorts.
- G. Floridan Climate in Other Lands.
 - 1. South America.
 - a. South Eastern coast.
 - 3. Asia.
 - a. China-southern part.
 - b. Japan—southern half.
 - 4. Australia.
 - a. Southeast coast.

Californian Climate.

A. Characteristics.

Oceanic

- 1. Hot, dry summer.
- Mild, wet winter.
 Heavy rainfall—ocean winds.

Rainfall-Los Angeles, California.

Jan: Feb: Mar: Apr: May: Jun: Jul: Aug: Sept: Oct; Nov; Dec. 3.6: 3.6: 3.5: 1-3: .3: .1: trace : .7: 1.3: 3.2. Temperature.

52: 52: 53: 60: 61: 68: 71: 72: 70: 62: 60: 55. Causes. B.

- Japanese current. 1.
- 2. Prevailing westerlies and nearness of ocean.
- 3. Influence of mountains.

Physical Features. С.

> 1. Mountains.

- a. Coast Range.
- Sierra Nevada-Snowy Range. b.
- C. Peaks.
 - Mt. Shasta. Lassen's Peak. Mt. Whitney.
- Rivers.
- - a. Sacramento.
 - b. San Joaquin.
- 3. Lakes.

2.

- a. Tulare (not important).
- Harbors. 4.
 - a. San Francisco.
 - San Diego. b.
 - c. Long Beach.

- d. Los Angeles (artificial harbor).
- e. Monterey Bay.
- 5. Valleys-Extent and importance.
 - a. Sacramento. Great central tropical valley.
 - b. Santa Rosa.
 - Famous for great vineyards. c. Santa Clara.
 - c. Santa Clara. Famous for flowers and seeds.
 - d. Yosemite.
 - Big Tree region.
 - Many Indian legends connected here.
 - e. Imperial Valley.
 - Irrigated region.
 - f. Santa Barbara.
 - Fruit growing region.
- 6. Ocean, Pacific.
 - Causing good harbors and transportation.
- 7. Deserts.
 - a. Mohave.
 - b. Death Valley.
 - c. Colorado.
- D. Characteristic Products.
 - 1. Fruits.
 - Tropical, semi-tropical, and temporate region.
 - 2. Grains and cereals.
 - 3. Vegetables.
 - 4. Dairy products.
 - 5. Fish—shell fish, tuna.
 - 6. Gold and silver.
 - 7. Cattle and sheep.
 - 8. Salt and soda.
 - 9. Lumber.

E. Industries.

- 1. Agriculture.
 - 2. Ranching.
 - 3. Fruit raising.
 - 4. Lumbering.
 - 5. Dairying.
 - 6. Mining.
 - 7. Commerce.
- F. Californian Climate in Other Lands.
 - 1. South America.
 - Chili.
 - 2. Europe.
 - Spain, France, Italy, Greece.
 - 3. Africa.
 - Northern part along the Mediterranean.
 - 4. Asia.
 - Euphrates Valley
 - Asia Minor
 - 5. Australia.
 - Southern coast.
- G. Cities of Importance.
 - 1. San Francisco.
 - On San Francisco Bay. Doorway of U. S. looking toward Asia.
 - 2. Sacramento.
 - Center of Sacramento valley.
 - 3. San Diego, Los Angeles, Santa Barbara, Sea Ports.
 - 4. Needles.
 - 5. Fresno.

Coloradoan Climate.

A. Characteristics-mountainous.

1. Great daily change.

2. Small rainfall.

3. Cool summer.

4. Cold winter.

Rainfall, Breckenridge, Colorado.

Jan: Feb: Mar: Apr: May: Jun: Jul: Aug: Sept: Oct; Nov; Dec. 1.8: 3 : 3.5: 3 : 2.1: 1 : 2.2: 2 : 1 : 1.2; 2.1; 2.7. Temperature.

15: 15: 22: 29: 39: 48: 53: 54: 46: 36; 26; 17. B. Causes.

1. High mountains-great altitude.

2. Western winds.

C. Physical Features.

1. Mountains.

Rocky Mountains—Formation of mountains. Volcanic deposits and minerals to be expected.

2. Rivers.

a. Head waters of many rivers.

Platte.

Yellowstone.

Missouri.

Columbia.

- Snake.
- Colorado.

Rio Grande.

- Arkansas.
- 3. Valleys.
 - a. Many small sheltered valleys between high mountain ridges.
- D. Characteristic Products.
 - 1. Minerals.
 - a. Gold and silver.
 - b. Copper, iron, lead, etc.
 - c. Coal, gas, and petroleum.
 - 2. Forests.
 - 3. Hardy grains and grasses in sheltered valleys.
- E. Industries.
 - 1. Mining.
 - 2. Smelting.
 - 3. Lumbering.
- F. Important Cities.
 - 1. Butte—Copper mining.
 - 2. Helena-Gold mining.
 - 3. Cripple Creek-Gold mining and smelting.
 - 4. Leadville-Gold, silver, and lead mining.
- G. Native Animal Life.
 - 1. Fur bearing.
 - a. Bear, wolf, mountain lion, mountain sheep.

H. Coloradoan Climate in Other Lands.

- 1. South America.
 - a. Andes Mountain range.
- 2. Europe.
 - a. Alps.
- 3. Asia.

a. Himalaya mountains.

Mississippian Climate.

A. Characteristics.

- 1. Hot summer.
- 2. Cold winter
- 3. Abundant rain and snow.

Rainfall—Pittsburg, Pennsylvania.

Jan: Feb: Mar: Apr: May: Jun: Jul: Aug: Sept: Oct; Nov; Dec. 2.9: 2.9: 2.9: 3 : 3 : 3.8: 4.5: 3 : 2.6: 2.5; 2.7; 2.9. Temperature.

71: 75: 73: 67: 56: 43: 35. 31: 33: 49: 51: 63: Causes. B.

1. In trade wind belt.

Long stretches of flat country. 2.

C. Physical Features.

- Mountains. 1
 - a. Ozarks.
 - Appalachian. b.
- 2. Rivers.
 - Mississippi. a.
 - b. Ohio.
 - Tennessee. c.
- Ocean. 3
 - Atlantic.
- Bays and Harbors. 4.
 - Massachusetts Bay-Boston Harbor. a.
 - b. New York Bay.
 - Delaware Bay. c.
 - Chesapeake Bay. d.
 - Many good harbors along coast. e.
- Plains, plateaus, and valleys. 5.
 - a. Costal plain and Piedmont Plateau.
 - b. Great central plain.
 - c. Mississippi Valley.
 - d. Ohio Valley.
 - e. Red River Valley.
- D. Characteristic Products.
 - 1. Grains.
 - Wheat. a.
 - Corn. (Important bi-products). b.
 - Small grains, and cereals. c.
 - 2.Forests.
 - a. Deciduous trees.
 - 3. Fruits.
 - a. Berries and small fruits. (Cranberries).
 - b. Orchard fruits-peaches, apples, etc.
 - Grapes. c.
 - Fish. 4.
 - Oysters, cod, and mackerel. a.
 - 5. Cattle, sheep, and horses.
 - 6. Minerals.
 - a. Coal, natural gas, and petroleum. 7.
 - Semi-tropical plants.
 - a. Cotton, hemp, and tobacco.
- E. Industries.
 - Agriculture. 1.
 - a. Farming.
 - 1. Wheat-great extent of farms.
 - 2. Corn-hog and cattle raising.
 - 3. Cotton and tobacco plantations.
 - b. Orchards.
 - Vineyards, cranberry bogs, nurseries.
 - Stock raising in Blue Grass region. c.
 - 2. Manufacturing.
 - Flour and the bi-products. a.
 - Canning-fruits and vegetables. b.
 - c. Furniture.

- d. Cloth-cotton, wool, and silk.
- e. Machinery and implements.
- f. Jewelry, clocks, etc.
- g. Meat packing.
- h. Dairy products.
- 3. Lumbering.
- 4. Mining.
- 5. Fishing.
- 6. Commerce (Especially great).
- F Cities of Importance.
 - 1. Reasons for location and size.

Ocean ...

Ports

- a. New York-gateway to U.S. from Europe.
- h. Boston-center of great manufacturing district. Shipping point.
- Philadelphia-shipping point for interior. c.

River Ports

- d. Minneapolis-manufacturing center.
- St. Louis-shipping point. 0
- f. Cincinnati-shipping point.
- Kansas City-manufacturing and transportation ceng. ter.

Lake Ports

- h. Omaha-transportation center.
- Chicago-center of interior industry. i.
- Detroit-manufacturing center. i.

On border of Canadian Climate.

G. Native Animals.

1. Deer.

2. Fur bearing-bear, wolf, fox, etc. H.

- Mississippian Climate in Other Lands.
 - 1. South America.
 - a. Pampas region.
 - Uraguay.
 - Paraguay.
 - Europe. 2.
 - 1. Great central portion.
 - Central France.
 - Southern Germany.
 - Northern Austria.
 - Southern Russia including the Black Soil Belt.

3. Asia.

China. 1.

Southeast of Desert of Gobi.

Japan.

Northern half.

Nevadan Climate.

A. Characteristics.

- 1. Hot summers.
- 2. Cold winters.

3. Small amount of rainfall.

Rainfall-Canon City, Colorado.

Jan: Feb: Mar: Apr: May: Jun: Jul: Aug: Sept: Oct: Nov: Dec. 2 : 1.5: 1-2: 0.3: 0.7: 0.1: 0.1: 0.3: 0.3: 0.6; 1.2; 1.7. Temperature.

33: 36: 41: 47: 54: 61: 68: 67: 60: 50: 42: 34. Causes. **B**.

Shut in by mountains and plains.
 In western wind belt.

- C. Physical Features.
 - 1. Mountains. Basin Ranges.
 - Columbia Plateau. Colorado Plateau.
 - 2. Rivers.
 - a. Columbia.
 - b.Snake.
 - c. Missouri.
 - d. Platte.
 - e. Yellowstone.
 - 3. Lakes.
 - a. Great Salt Lake.
 - 4. Plains.
 - a. Great Western Plains.

D. Irrigation.

- 1. Importance.
 - a. Rich lands but insufficient mosture.
- 2. Extent.
 - a. Use in Colorado, Wyoming, and Montana.
 - b. Use in Utah, Idaho, and California.
 - c. Government work in irrigation.
 - Reclamation of arid regions.
- E. Characteristic Products
- 1. Forests.
- 2. Grains and cereals.
- 3. Fruit.
- 4. Cattle and sheep raising.
- 5. Minerals.
- 6. Manufactured Products.
- 7. Alfalfa.
- 8. Potato.
- 9. Sugar Beet.
 - 1. Lumbering.
 - Agriculture.
 Ranching.
- 3. Ra
- 4. Mining.
- 5. Manufacturing.
- G. Nevadan Climate in Other Lands.
 - 1. South America.
 - a. Southern Argentina.
 - 2. Europe.

Industries.

- a. Central Spain.
- 3. Asia.
 - a. Southern Siberia, Central Asia, Northern Persia and Turkey.
 - Compare agricultural methods in these regions with those in United States.
- H. Important Cities.
 - 1. Spokane.
 - Manufacturing and shipping city.
 - 2. Salt Lake City.
 - 3. Denver.
 - 4. Boise.
 - 5. Pueblo.

Oregonian Climate.

F.

- A. Characteristics-Oceanic.
- 1. Mild winters.
- 2. Cool summers.
- 3. Rainfall heavy in winter.

Rainfall—Tatoosh Island, Washington.

Jan: Feb: Mar: Apr: May: Jun: Jul: Aug: Sept: Oct; Nov; Dec. 13: 9.3: 8.2: 7.1: 4.2: 4: 2: 2.2: 5.7: 8; 12.5; 15.3. Temperature—tatoosh Island, Washington.

41: 41: 44: 46: 50: 54: 56: 56: 54: 50; 46; 43. B. Causes.

- 1. Japanese current.
- 2. Prevailing westerlies and nearness of ocean.
- 3. Influence of mountains.
- C. Physical Features.
 - 1. Mountains.
 - a. Coast Range.
 - b. Cascade Range.
 - 2. Rivers.
 - a. Columbia.
 - b. Willamette.
 - 3. Lakes.
 - a. Crater Lake (not important).
 - 4. Bays and Sounds.
 - a. Puget Sound.
 - b. Harbors along coast.
 - 5. Valleys.
 - a. Columbia River valley.
 - b. Willamette River valley.
 - 6. Ocean-Pacific.
 - a. Causing good harbors and easy transportation.
- D. Characteristic Products.
 - 1. Forests-Pine and Redwood.
 - 2. Fruit—Temperate region fruits.
 - 3. Fish-Salmon.
 - 4. Dairy Products.

5. Grains—wheat, barley, small grains. Irrigated regions east of Cascades.

- E. Industries.
- 1. Lumbering.
- 2. Fishing.
- Dairying.
 Agriculture.
- 7. Manufacturing.
- 8. Canning-fruit and fish.

Mt. Rainer: Mt. Hood.

Mt. Whitney.

9. Commerce.

6. Mining.

- 5. Ship building.
- F. Oregonian Climate in Other Lands.
 - 1. South America.
 - a. Southern Chili.
 - Compare scenery, products, and people.
 - 2. Europe.
 - a. British Isles, Denmark, Northwest coast France. Products, industries, and people.
 - b. Australia-southeastern part.
 - c. New Zealand.
 - Location, wonderful scenery, products.
- G. Important Cities in Oregon and Washington.
 - 1. Reasons for location.
 - a. Seattle, on Puget Sound.
 - Advantages.
 - Near ocean.
 - Near lumber land therefore ship building center.
 - Distributing point to Alaska.
 - b. Portland.
 - Near junction of Columbia and Willamette.
 - c. Astoria.
 - At mouth of Columbia.
 - d. Salem.
 - In center of Willamette valley.

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- e. Tacoma.
- Trade center—lumber, grain, etc.
- f. Everette and Bellingham.

Manufacturing centers.

Climates According to Winds

Tundra, Hardy p. 113.

"Plant Georgraphy"—Hardy. "U. S. Geography"—Dryer. A. Westerlies.

1. Artic climate. Cold all year. Rainfall low. Targa, Hardy p. 106. Short, hot summers. Long, cold winters. Rainfall less than 40 in. 2. Canadian climate. Oceanic: mild winters. 3. Alaskan climate. Cool summers. 60-100 in. rainfall. Hardy, Chapt. 10 New Zeal. Mild winters. 4. Oregonian climate. Cool summers; winter rain. Med. Woodlands, Hardy p. 70. Dry summers, wet winters; warm 5. Californian climate.

climate.

Rainfall-20 in.

87.

6. Nevadan climate.

7. Mississippian climate.

8. Coloradoan climate.

B. Trade Winds.

C. Doldrum.

Hardy. Temp. Deciduous Forests p. 98. Hot summers, cold winters; plenty of rain and snow.

Hardy-Steppe p. 92; Sagebrush p.

Cold winters, hot summers.

Hardy p. 120-135. High mt. climate. Great daily change of temperature small rainfall, 730 seasons.

1. Floridan climate.

2. Arizonian climate.

- 3. Mexican climate.
- 4. Caribbean climate.

Hardy 62-29.

No dry season; most of rainfall in summer and autumn, less than 80 in. Hardy 55-61.

Always dry; very hot summers; rainfall less than 10 in.

Dry winter; rainfall less than 60 in. Hardy 50-54; 37-44.

Hardy 44-50; 32-37.

Even temperature; tropical; dry and wet season.

1. Amazonian climate. Hardy p. 20-31. Rainy all year, no seasonal change of temperature.

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Outline of Human Geography*

North America.

American Mongols-Indians. Boreal Mongols-Eskimos.

I. Origin-Asiatic.

> Left Asia before yellow race as such had completely established its type.

II. Types-two.

> Tall, cigar sign type with eagle nose. Largely confined to east of the Rockies, Algon, Kian, Siouian, Iroquoian, etc.

Short, heavy set, broad faced type most prevalent west of Rocky Mountains, Alaskan Coast Indians, Puget Sound Indians best examples.

- III. Indian Language Families, Eastern North America.**
 - Algonkian-Shawnee, Pequot, Narragansett, Powhatan, Dela-1. ware, Mohican, Ojibwa, Chippewa, Cree, Illinois, Ottawa, Pottawatomie, Sac and Fox, Blackfeet, Arapahoe, Cheyenne, (notice that most of the historically famous eastern tribes are Algonkian). Also King Philip, Powhatan, Tecumseh, and Pontiac, Jim Thorpe, famous athlete, is a Sac and Fox.
 - Iroquoian-Cayuga-Seneca, Mohawk, Tuscarora, Onondaga, Onei-2. da, Cherokee, Erie and Huron.
 - Siovian—Dakota, Winnebago, Catawba. Sitting Bull and Rain-in-the-Face were Dakotas. 3.
 - Muskhogian-Choctaw, Chickasaws and Creeks. 4.
- IV. Indian Language Families, Western United States.
 1. Shoshoean—Ute, Piute, Enuke, Shoshone, Comanche, Aztec.
 2. Athapascan—Alhapascans, Apache, and Navajo. Geronimo was an Apache.

See Clark Wissler "The American Indian".

- Indian Life as Affected by Climate. V.
 - 1.
 - Canadian Climate—Birch bark, pine forest, trapping civilization. Wild race—Ojibwa, Chippewa, Cree, (Read Hiawatha.) Mississippian Climate—Board leafed forest, deer hunting, corn planting civilization—Shawnee, Delaware, Cherokee, Powha-2. tan, Sac and Fox, Mochican, Iroquoian group.
 - Nevadan Climate-Buffalo Culture, Dakota, Arapahoe, Cheyenne, 3. Kiowa, Comanche, Ute, Blackfoot.
 - Arizona Climate—Pueblo or Zuni culture. Seditary Pueblo. Nomadic shepherds, Navajo (See Blankets), Apache. 4.

Mexican Climate-Culture of Aztecs.

Problem Method of Attack.

(a). Show how the house or other shelter of each Indian group is a response to the climate and the building materials at hand. For references on Indians study Bulletin 30, Bureau of Ethology entitled "Handbook of American Indians". (b) Show why the civilized tribes have been in the mountains of the west

rather than the settled Mississippi Valley.

4. Arizona Climate-Pueblo or Zuni culture (Sedentary Pueblo), Nomadic shepherds, Navajo (See Blankets) Arapahoe.

Mexican Climate-Culture of Aztecs.

Problem Method of Attack.

(a) Show how the house or other shelter of each Indian group is a response to the climate and the building materials at hand. For references on Indians study

*This outline prepared by Professor George Barker, Department of Geography, Colorado Teachers College.

*Select from this list several tribes (or groups) to present to the children.

Bulletin 30, Bureau of Ethology entitled: "Handbook of American Indians." (b) Show why the civilized tribes have been in the mountains of the west rather than the settled Mississippi Valley.

- South American Indians. VI.
 - Indians of the Tropical Region-Caribs, Awawaks and 1. Guarani (chief food, manioc or tapioca).

Problem Method of Attack.

- Respose in food and clothing to climate. (See Clark Wissler, "American Indian").
- Indians of the Plateaus of the Andes-High culture-culti-2. vation of the potato, domestication of the llama and alpaca. Their irrigation systems and governments before Columbus. Problem Method of Attack.

Response of physical type to high altitude (short, thick set, barrel chested). Why?

Indians of the wooded districts of Chile-their war-like qual-3. ities (The Iroquois of South America). Fishing, hunting, Potato culture.

Problem Method of Ottack.

Why difficult to conquer their country? Physical type, short, thick set, light ruddy complexion. Why?

- Indians of the Plains of Argentine-Dependence of their 4. culture on the hunting of the guanaco. (Compare with Dakotas and bisen in North America). Nomadic life, splendid physique, tallest people of world. See Clark Wissler. "The American Indian."
- Indians of Tierra del Fuego-Struggle for existence in 5. stormy climate too cold for agriculture. Food-fish, seal Growths due to damp climate on and stranded whale. trunks of trees. Physical type-Stunted and poor except in East Tierra del Fuego, where people belong in group four. VII. Food products borrowed by the white man from the Indian.
 - North America-Corn, chile beans, squash, chocolate, vanilla, chili pepper, pineapple, maple sugar.

South America-Corn, tapioca, mate, or paraguy tea, sweet potato, Irish potato, peanut.

- European Races in North America. VIII.
 - 1. Nordic-English and Dutch.
 - 2.
 - Alpine-Nordic, Pennsylvania Germans, French in Canada. Mediterranean-Spanish in Mexico, Central America and 3. Spanish West Indies.
 - Nordic and Alpine brought women with them. Mediterran-4. eans intermarried with native women, thus originated Mestizo of Mexico and Central America.
 - Later emigrations—Mediterranean—Italians and Jews to United States, Spaniards to Cuba. Alpine—Balkan peoples and people of Russia and former Austria-Hungarian realm 5. to United States.

Nordic-Swedes, Norwegians and Danes to United States and Canada.

Problem Method of Attack.

Effect of frontier and sea journey in selecting restless Nordic type temperamentally. See Ripley's "Races of Europe."

Best Adaptations of immigrant population according to climate. IX.

- Mediterranean-Floridan, Arizonan, Californian, or Mexican 1. climates.
 - Alpine-Mississippian climate or Nevadan climate. 2.

Nordic-Oregonian, Alaskan, or Canadian climate. 3.

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Problem Method of Attack.

Why is this grouping true? Study Abraham Lincoln and Ondrew Jackson as products of the modified democracy of the Mississippian forest area (pioneer type).

X. Boreal Mongol.

1. Eskimo—Physical type, adaptation of culture to surrounding. Inventive genius, artistic ability. See Bulletin 30, Bureau of Ethnology.

Europe

- I. Neanderthal Man.
 - 1. Lived in the Fourth (Wisconsin) Glacial Period.
 - 2. Climate—Cold.
 - 3. Cave man in Rough Stone Age with no agriculture. Cave as refuge from cold and animal enemies.
 - 4. Lived in France and Germany chiefly.
 - 5. Physical type—Low brow, heavy projecting snout, low physical and mental type. Now extinct.
- II. Cro-Magmon Man.
 - 1. Supplanted and killed off neanderthal man. Much higher type—long head, high cheek bones, straight nose, as intelligent as average European today. Used rough stone weapons. Made drawings on cave walls. Still found in France mixed with modern peoples at Oleron and Dordogne.
- III. Three modern European Races.
 - 1. Nordic-Tall, blonde, long headed.

Temperament-Restless and anxious to translate thought into action.

Nordic Nations—Norwegians, Swedes, Danes, North Hollanders, Flemish, Northwest Germans, (Westphalia, Schleswig-Holstein, and Hanover). East English, East Lowlands of Scotland, Scotch Islands.

2. Alpine—Medium stature, stocky frame, broad head, round face, medium complexion.

Temperament—Passive, hard working, plodding and methodical.

Alpine Nations—Swiss Highlanders, people of the Carpathians, Central French, South Germans (Bavarians) and North Italians.

3. Mediterranean—Short, brunette, long headed, oval face, Temperament—Imaginative, artistic, potentialities usually well developed.

Mediterranean Nations-Spaniards, South French, South Italians, and Greeks of the Islands.

- IV. Crosses.
 - 1. Mediterranean and Nordic—Welsh, Highland Scotch and Irish—Blue eyes of Nordic—black hair of Mediterranean.
 - 2. Alpine and Nordic—Prussians, Saxons and other people of east and southeast Germany. German Austrians, Poles, Russians and Bohemians.
 - 3. Mediterranean and Alpine—Greeks of Mainland, peoples along Adriatic lettoral, Syrians.
- V. Climatic Distribution.
 - 1. Nordic (cool oceanic climates)—Oregonian, Alaskan, and oceanic shores of Canadian climate.
 - 2. Mediterranean—California climates of Mediterranean and Atlantic ocean lettoral.
 - 3. Alpine (The continental climate loving race of Europe)— Mississippian, Interior Canadian, Coloradoan in high Alps.
- VI. Relation of Race and Language.1. Language Groupings of Europeans. Celtic Speaking

Blend Race Breton of France-Nordic and Alpine. Welsh-Med. and Nordic. Irish-Med. and Nordic. Highland Scotch-Med. and Nordic. Scotch of Far North Isles-Nordic. Teutonic Speaking East English-Nordic. West English-Nordic and Med. Northwest German—Nordic. Northeast German—Nordic and Alpine. South German-Alpine. German Swiss-Alpine. German Austrian-Alpine and Nordic. Hollander-Nordic. (Some Hollanders, Nordic and Alpine). Fleming—Nordic. Dane—Nordic. Swede-Nordic. Norwegian-Nordic. Lowland Scotch-Nordic in East-Nordic and Med. in West. North French-Nordic and Alpine. Latin Speaking. Central French-Alpine. South French-Mediterranean. Spanish-Mediterranean. North Italian—Alpine. South Italian—Mediterranean.

Slavic Speaking.

Bohemian-Nordic and Alpine.

Russian-Nordic and Alpine, and in east and south a dash of Mongol.

Pole-Nordic and Alpine.

Serbian-Alpine.

Bulgarian-Alpine and Mongol.

People of Mongolian Speech in Europe.

Finn-Nordic and Mongol.

Magyar (Hungarian)-Alpine and dash of Lapp-Mongol, Mongol and Nordic.

Mongol and Nordic.

Turk-Alpine and Mediterranean and dash of Mongol.

Basques-Primitive speech-Mediterranean.

Letto-Lithuanian speech-Nordic.

See Ripley "Races of Europe." Hadden "Races of Man and their Distribution." Keane, "Man—Past and Present."

Asia

I. Caucasic Races.

1. Characteristics:

- a. Fair skin (esp. in northern races). Olive to brown (in southern races.)
- b. Straight set eyes (blue, gray, brown, black).c. Abundance of hair (often wavy and long, varying in color from yellow to red, brown or black). Men generally have beards.

2. Distribution.

- a. Almost in all parts of Europe.
- b. Africa north of the Sahara. (Southern Europeans).

c. Western Asia.

- Subdivisions in Europe. 3.
 - a. Mediterranean.

- b. Nordic-northern European.
- c. Alpine-Swiss, Adriatic.
- Subdivisions in Asia. 4.
 - a. Georgian's of the Caucasus region.
 - b. Semitic races of Arabia and Syria (Jews, Arabs, Persians).
 - c. Armenians and Kurds of East Asia Minor. Iranians of Persia.
 - Afghans and Natives of Baluchistan.
 - d. Hindus of North India (speak Aryan language). (Hindus of South India are of doubtful origin) mixed with Negrol (?)
 - e. Slavonic (Alpine) peoples from Russia to Southern Siberia and Russian Turkestan.
 - f. British in India and French Indo-China. (Mostly government officials).
- II. Mongolian Races.
 - 1. Includes about two-thirds of whole population of Asia.
 - 2. Characteristics:
 - a. Skin is of yellowish hue.b. Prominent cheek bones.

 - c. Oblique eyes.
 - 3. Subdivisions.
 - a. Northern Mongols (or Mongola-Tatars) include:
 - Tribes in northern Siberia (Yakuta) akin to Lapps. 1. in Europe.
 - Many tribes of southern Siberia and Turkestan-2. Turkomans.
 - Ottoman Turks (Osmanli). Japanese and Koreans. 3.
 - 4.
 - Manchus (ruling class in Manchuria, found in Man-5. churia).
 - 6. Mongols (found in Mongolia).
 - Lapps (in Europe). 7.
 - Samoyeds (in Siberia). 8.
 - b. Southern Mongolians include:
 - 1. Inhabitants of Highland of Tibet.
 - 2. China proper.
 - 3. Burma.
 - 4. Himalavan slopes in India.
 - c. Boreal Mongols.
 - 1. Eskimos of N. A.
 - d. American Mongols.
 - 1. Indians of North America.
 - e. Oceanic Mongolians include:
 - Bulk of inhabitants of Malay Penin.
 - 2. Bulk of inhabitants of East Indies.
 - 3. Bulk of inhabitants of Formosa.
 - 4. Bulk of inhabitants of Phillipines.
- III. Negro Races (in Asia).
 - Subdivisions in Asia (Oriental negroes). 1.
 - a. Negritos.
 - Characteristics. 1.
 - (a) Small of stature.
 - (b) Wavy or tufty black hair.
 - Distribution. 2.
 - (a) A few in Malay Penin.
 - (b) A few in Andaman Isles.
 - (c) Some parts of the East Indies.
 - (d) Some parts of the Philippines.
 - b. Papuan or Melanesian. Tall, long headed, usually convex nose, frizzy headed, very dark.

Africa

Key Phrase to Africa-"Africa starts south of the Sahara. The plants, animals and human inhabitants of Africa that are typically African are not found north of the Sahara. Examples. 1. Baobab and oily, palm, rubber plants.

- 2.
- Rhinoceros, elephant, gorilla.
- 3. Negro races of man.
- Groups of African Negroes. I.
 - 1. Negro (nearly black complexion, wooly hair, flat face, thick lips, long flat feet. Found in purity along thickly forested area of gold coast. Temperament—Imitative, jolly, musical, not inclined to worry over future, content, with little, hence furnished slavers with ideal temperament for forced labor. Our negro slaves in America derived from this group. See Keane, "Man, Past and Present."
 - Pygmy—Very short, between three and four feet, coffee colored in complexion, hair scattered over head in little tufts 2. with bare patches between. Low culture. Found in forests of Congo.

See De Quatrefuges "The Pygmies."

- Bushmen-Between four and five feet, emaciated, high cheek 3. bones, narrow eyes, pinched nostrials, complexion like dry leaves, hair in tufts with bare patches between, skin leath-ery. Found in Kalahari Desert and adjacent parts of South Africa.
- 4. Bantu-Astone age cross of white and guinea negro. Found in Africa, South of the Kongo, Zulu, Basuto, Mathabali, "Kaffirs" Sudanese, white-black crosses, Hausa, Obyssinian, Nubian, Masii, Somali and people of Uganda.
- II. Climatic Adaptations.
 - 1. Guinea Negro-Amazonian and Caribbean.
 - 2. Adaptation of physique and life to Pygmy-Amazonian. tropical forests.
 - 3. Bushman-Arizonian-Adaptation of physique and life to desert.
 - Bantu-Mexican-Caribbean and Floridan climate. Adapta-4. tion of these to less culture centering around grazing herds.
 - See Keane, "Man-Past and Present."
 - Ratzel "History of Mankind". 5. Adaptation of South African Dutch (Boer) to Mexican (cattle raising) environment and climate.

Australia

- I. Primitive Australians—three strains.
 - Paupan (Asiatic, or Oriental Negro). 1.
 - 2. Dravidian (possibly Mediterranean white) from India.
 - 3. Malay (Oceanic Mongol).

1-2-3 blend to make the present Australian aborigines.

Physical type-dark, flat-footed, heavy ridge across brow, low stupid features, heavy projecting snout, wavy or straight hair, full beard.

Mental type low-Physical type not superior.

Cause of lack of development-Poverty of Australian environment in useful animals and useful plants until the white man introduced them.

Problem: Could Australia today support five million white people if all plants and animals of non-Australian origin were suddenly obliterated?

IT. White Australians.

Usually Nordic or Nordic and Mediterranean from British Isles. White Australians settle in Floridan, Californian and Mexican climatic provinces in Australia. They avoid the Arizonian (except mining camps) and Caribbean climatic provinces, which thus remain empty lands. Why is this so? Keane, "Man-Past and Present."

General Bibliography

Branom, M. E. and F. K., "The Teaching of Geography"......Guinn & Co. Bonser, F. G., "The Elementary School Curriculum." Chapter X..... MacMillan Company Charters, W. W., "Teaching the Common Branches." Chapter IX Houghton, Mifflin Company Freeman, F. N., "Psychology of the Common Branches." Chapter VIII. Houghton, Mifflin Company Geike, A., "Teaching Geography" MacMillan Company Holtz, F. L., "Principles and Methods of Teaching Geography" MacMillan Company
Huttington and Cushing, "Principles of Human Geography"...John Wiley Kendal & Mirick, "How to Teach the Fundamental Subjects." Chap-ter IV. Houghton, Mifflin Company
King, C. F., "Methods and Aids in Geography." McMurry, C. A., "Specials Methods in Geography"...MacMillan Company
Southerland, "The Teaching of Geography"...Scott, Foresman Company
Wilson, H. B., & G. M., "Motivation of School Work." Chapter VIII Houghton, Mifflin Company

Houghton, Mifflin Company

HISTORY **Third Grade**

The aim of the history in this grade is to give the children an intrest in their own community and their state and to give them experience with simple living conditions such as were experienced by the Indians in their primitive ways of living and the simple ways of the early settlers of this locality. This will be done through the history stories. These stories will include the group of stories, still in manuscript form, written by Mrs. Allen of Greeley, which are nearly all first hand knowledge of the history of this community, parts of the stories of the expeditions of Lewis and Clark, stories of Pike, Fremont, Kit Carson and Green Russell.

Outline for the Study of the Indians

- Early Indian Life in Colorado. I.
 - Different types of Native Tribes. Α.
 - 1. Mountain tribes-Utes.

 - Plateau tribes—Navajo.
 Desert tribes—Cheyennes, Comanche, Kiowa.
 Cliff dwellers—Pueblo, Hopi, Zuni.
 Cliff dwellers—freeh type of tribe.
 - B.
 - 1. Appearance.
 - 2. Dispositions.
 - 3. Homes.
 - Dress. 4.
 - Customs and religious ceremonials. 5.
 - Mode of gaining a livlihood. 6.
 - Mode of travel, trade and exchange. 7.
 - Relation to white man. 8

Outline for the Study of the Early Explorers and Settlers

- Τ. The Coming of the White Man.
 - Å. Purpose.
 - Means of Travel. R
 - 1. Travel on horseback.
 - 2. Emigrant wagons.
 - 3. Prairie schooners.
 - Stage coaches. 4.
 - Relations and difficulties with Indians. С.
 - Early Explorers. D.
 - Lewis and Clark (study as much as has bearing on History of Colorado). 1.
 - 2. Fremont.
 - 3. Kit Carson.
 - 4. Green Russell.
 - E. Results of these explorations.
 - Early settlements. F.
 - 1. Greeley Colony.
 - a. Founding of colony.
 - 1. When.
 - 2. By whom?
 - 3. Why.
 - b. Maning of colony.
 - 2. Trouble with the Indians.
 - Early life and trade. 3.
 - a. Homes.
 - b. Occupations.
 - c. Transportation.

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- 4. Comparative study of growth of colony.
 - a. Homes.
 - b. Public buildings.
 - c. Schools.
 - d. Churches.
 - e. Means of transportation and travel.
 - f. Industries.

The use of all available material and devices, such as maps, reference books, construction work, standtable, dramatizations and projects growing out of the study of these stories will be prominent features in the teaching of this history work.

Possible projects might be-

Depicting scenes of the early Indian life, liife of settlers, crossing of plains in the prairie schooners and the making of a pueblo in the standtable.

Fourth Grade

The history stories taught in this grade are based upon the geography studied and thus will deal with the stories of explorers, discoverers and makers of our western country and of the Mississinni Valley

ers and makers of our western country and of the Mississippi Valley. These stories will include those of the Lewis and Clark Expeditions and their opening of the Great Northwest, Colorado, Fremont, and Carson, Powell, Pike, Parkman, Balboa, Pueblo, Western Fur Traders, Mormons, and the Spanish Missions; the Jesuit Missionaries, stories of Cartier, Joliet, etc.

Outline for the Study of the Explorers

I. Aims.

II. Difficulties.

- A. Physical barriers in opening the new country.
- B. Struggle for a livlihood.
- C. Indian Troubles.
- D. Protection-ways and means.

III. Results of attempts of explorations and of settlements.

IV. Comparisons between the particular story told with others similar in character.

(Note)—The use of all available material and devices in the study of these stories and construction work in projects growing out of them should be made very prominent.

Use of supplementary reading material should form part of the outside work.

Outline for the Study of the Pueblo Indians

- I. Where found.
- II. Homes.

A. Kind of homes-how built.

- B. Home life.
- C. Relations with other tribes.
- D. Comparison with other Indian tribes as to their characteristic traits in manner of life.
- III. People.
 - A. Character of.
 - B. Contrast with other Indians.
 - C. Manner of living.
- IV. Customs.
 - A. Beliefs and traditions.
 - B. Primitive forms of industry.
 - C. Dress.

- D. Method of warfare.
- E. Amusements.

The Study of Spanish Missions

- I. Location of Missions.
- II. How the missions came to be built-and by whom.
- III. Success and result of the building of them.

Outline for the Study of the Western Fur Traders

- I. Traders.
 - A. Character of.
 - B. Purpose of.
 - C. Hardships and dangers encountered.
 - D. Manner in which they carried on their work.
- II. Trading posts.
 - A. In the Rocky Mountain section.
 - B. On the Upper Arkansas River.
 - C. Bent's Fort.
 - D. On South Platte River.
 - E. Fort St. Vrain.
 - F. Fort Laramie.
 - G. Western Slope.
 - H. Santa Fe Trail.
- III. Relation of Trappers and Traders with the Indians.
- IV. Decline of Fur Trade.

The Study of Pioneer Life in Middle West

- I. Colonial Life in the French settlements in the St. Lawrence Valley and along the Great Lakes.
- II. Indian Life in the forests of the Mississippi Valley and region of Great Lakes compared with the Indians and their life in the West.
- III. Stories of Pioneer Life in the Middle West.
- IV. Stories of the Following Explorers:
 - A. Marquette and Joliet.
 - B. Jessuit Missionaries.
 - C. La Salle.
 - D. Ponce DeLong.
 - E. Daniel Boone.
 - F. De Soto.

Fifth Grade

The history in this grade is based upon Beard and Bagley, "First Book in American History."

- I. The Age of Discovery.
 - (a) The Early Life of Columbus.
 - (b) First Voyage of Columbus.
 - (c) The later voyages of Columbus.
 - (d) The discovery of America.
- II. How to Reach Asia by way of the New Lands.
 - (a) The English King, Henry VII, takes part in exploration.
 - (b) Magellan's voyage around the World.
 - (c) The King of France sends out explorers.

III. Rivalry between Spain and England.

- (a) Deeds of Sir Francis Drake.
 - (b) The battle with the Armada.
- (c) The way prepared for English settlements.

- IV. Finding Settlers for the New World.
 - (a) Founding of Virginia.
 - (b) Virginia's Neighbors.
 - (c) New England Colonies.
 - Winthrop, Roger Williams, Anne Hutchinson, (1)Thomas Hooker.
 - Henry Hudson and The Hudson Valley. (d)
 - William Penn-Pennsylvania and Delaware. (e)
 - (f) James Ogelthorpe and Georgia.
- V. The Clash of Empires in America.
 - (a) French Ambitions and La Salle.
 - (1) Lake Region.
 - (2) Ohio and Mississippi, Louisiana.
 - (b) George Washington and the French and Indian Wars.
 - William Pitt, the great empire builder. (c)
 - (1) General Wolfe and capture of Quebec.
- The Spirit of American Independence. VI.
 - British restrictions and American energy. (a) (b)
 - Samuel Adams-The man of the town meeting.
 - (1)Stamp Tax.
 - (2)Other oppressive laws.
 - (3) Boston Tea Party.
 - (4)First continental congress.
 - (c) Patrick Henry, the orator of the Revolution.
 - Henry and the Stamp Act. (1)
 - Calls upon Virginia to take up arms. (2)
 - (3)
 - Patrick Henry's Oration. Second Continental congress. (4)
 - Edmund Burke-The British friend of America. (d)
 - (1) Burke on taxation and conciliation.
 - (2)England's sympathy with Americans.
- VII. American Revolution.
 - (a) How to win Independence against great odds.
 - (b) Washington as Commander.
 - (1)Bunker Hill.
 - (2)Trenton.
 - Valley Forge. West Point. (3)
 - (4)
 - (5) Saratoga.
 - (6)York Town.
 - (c) Heroes of the Navy.
 - (1)Beginnings of the American Navy.
 - (2) John Paul Jones.
 - (3) John Barry.
 - Thomas Jefferson, the author of the Declaration of (d) Independence.
 - (e) Other civil leaders-Gosden, Morris, Sherman, Schuyler.
 - (f) Benjamin Franklin-an American hero abroad.
 - (1) In England.
 - (2) In France.
 - (3)Peace Treaty.
 - (4)The Constitutional Convention.

The Beginnings of a New Government.

- Union or Quarreling States. The new Constitution. (a)
- (b)
 - (1) Alexander Hamilton.
- The New Government of the United States. (c)
 - Washington, the first president.
 Jefferson and Hamilton clash.
 - Jefferson and Hamilton clash.
 - (3) John Adams, second president.
- IX. Expansion Westward.
 - (a) Louisiana Purchase.
 - (b) Lewis and Clark expedition.

VIII.

The Second War with England. X.

- Madison Driven into the War of 1912. (a)
- Battle of New Orleans. (b)
- Peace with England. (c)
- (d) Opposition to the War in New England.
- James Monroe and the Monroe Doctrine. (e)
- The Old East and the New West. XI.
 - Shall the Eastern States Control the Nation? (a)
 - Andrew Jackson-the Man from the West. (b)
 - Jackson as President. (c)
- Making an Industrial Nation. XII.
 - The Inventors. (a)
 - Eli Whitney and the Cotton Gin. (1)
 - Cyrus McCormick and the Reaper. (2)
 - Elias Howe and the Sewing Machine. (3)
 - John Fitch and the Steamboat. (4)
 - (b) Transportation.
 - The Three Uses of Steam. (1)
 - Robert Fulton and the Clermont. (2)
 - De Witt Clinton, the Canal Builder. (3)
 - The Canal and the Railway. (4)
 - The Telegraph. (c)
 - (1)Samuel Morse.

XIII.

- The Fate of the Southwest. (a)
 - Frontiersmen on the Mexican Border. (1)
 - (2)Western Margin of American Civilization.
- Texas and the Mexican War. (b)
 - Sam Houston. (1)
 - The Independence of Texas. (2)
- (3) War with Mexico.California and John C. Freemont. (c)
 - (1)
 - Captain John A. Sutter. Independence of California. (2)
 - (3)California, a Free State.

XIV.

- The Overland Trail. (a)
 - How can Oregon be Won for the United States? (1)
 - The Fur Traders; John Jacob Oster. (2)
 - (3)Relations with England.
 - The Majors; Jacob Lee, Marcus Whitman. (4)
 - The First Great Migration. (5)
 - The Oregon Boundary Question. (6)
 - (7)Washington.

XV.

- Slavery. (a)
 - The Clash of Sections. (1)
 - Slavery not Suited to Northern Climates. (2)
 - Slavery Makes two Sections. (3)
- John Calhoun and the Southern View. (b)
- William Lloyd Garrison Against Slavery. (c)
- Henry Clay, the Compromiser. (1) The Missouri Compromise. (d)
 - - Clay's Second Great Compromise. (2)
- (3) The Crisis of 1850. Daniel Webster—"The Union at all Costs." (e)
 - Robert Haynes-Favors Nulification. (1)
 - Webster-Hayes Debates. (2)

XVI.

- Abraham Lincoln-the Voice of the North. (a) The Life of Lincoln. (1)
 - Lincoln's Early Political Career. (2)
 - The Lincoln-Douglas Debates. (3)

- (b) Lincoln and the Slavery Question.
 - No Interference with Slavery in Slave States. (1)
 - (2)Lincoln Aagainst Slavery in the Territories.
- (c) Election of 1860.
 - (1)Break up of the Democratic Party.
 - (2)Stephen A. Douglas.
 - (3) John C. Breckenridge.
 - (4)Election of Lincoln.
- XVII. Jefferson Davis.
 - (a) How Should Southern Intrests be Produced.
 - The Cecession and Jefferson Davis. (b)
 - Life of Jefferson Davis. (1)
 - (e) Cecession as a Last Resort.
 - (1)Davis for President of the Confederacy.

XVIII.

- (a) Will the Union be Maintained.
 - (b) Lincoln's Measure for Saving the Union.
 - (1)The Call to Arms.
 - (2)The Blockade of Southern Ports.
 - (3)Slavery at Stake.
 - (4) Proclamation of Emancipation.
- (5) The Abolition of Slavery.
 General U. S. Grant—Commander of the Armies of the (c) United States.
- (1) Life of Grant and his Military Career. Robert E. Lee—Commander of the Confederate Armies. (d) Life of Lee and his Military Career. (1)
- (e) The End of Lincoln's Career.
 - (1)Lincoln's Plan for Restoring the Union.
 - (2)The Death of Lincoln.

XIX. On American Industrial Romance.

- (a) How to use Electricity for Light and Transportation.
- Thomas Edison. (b)
- Electricity for Lighting and Transportation. (c)
 - (1) Electric Lamps.
 - (2)A Central Electric Station.
 - (3)Electric Railroads.
- XX. The New South.
 - Could a Democratic Party be Restored. (a)
 - (b) The rise of Grover Cleveland.
 - (c) Grover Cleveland as president.
 - (1)Civil Service Reform.

(2)Hawaiian Islands annexed.

XXI.

- (a) United States among the World Powers,
- William McKinley and the Spanish-American War. (b) Dewey at Manilla Bay. Peace in new Territories. (1)
 - (2)
- (c) William Jennings Bryan.
- (d) New Territories in Far East.
 - (1)Phillipine Islands.
 - (2)The Boxer Uprising-China.
- XXII. Women and Human Welfare.
 - Woman's part in the Civil War. (a)
 - (1) Clara Barton and the Red Cross.
 - (2) Francis Willard and Prohibition.
 - (b) Women Winning Voice in the Government.
 - (2) Federal Suffrage Amendment.

XXIII.

- (a) President Roosevelt and Modern Questions. (2) President of the United States.
- (b) William Howard Taft and the Presidency.

XXIV.

- President Wilson and the World War. (a)
- America's part i nthe World War. (b)
 - League of Nations. (1)
 - (2)The end of the war.

HISTORY Sixth Grade

The purpose of the history in the sixth grade is to provide an intelligent background for a more detailed study of American History. To give some definite impression of the civilization of ancient and modern Europe and the efforts leading to the transplanting of those civilizations to America.

- A. The Dawn of History. I. The Dawn of History.
- - a. Use of fire, stone, knives, axes, bows and arrows.
 - b. Pottery making, spinning and weaving, metal working.
 - c. Agriculture, domestic animals.d. The invention of writing.
- The most ancient civilized people inhabited the fertile cres-cent which included the Valley of the Nile, a belt north of the II. Arabian Desert, and the Valley of the Tigres and Euphrates Rivers.
- The Ancient Egytians. III.

a. Character of their civilization.

- Babylonians, Assyrians and Persians. IV.
 - a. Characteristics of their civilization.
 - The Hebrews. V.
 - Their contribution to civilization. a.
 - The Phoenicians. VI.
 - Their contribution to civilization. a.
- VII. Aegean Civilization.
 - The earliest in Europe and a forerunner of that of the a. Greeks.
 - The Greeks and what we learn from them. **B**.
 - Ancient Greece. L
 - Location and natural beauty of Greece. a.
 - Character of Ancient Greek people. b.
 - What the Greeks thought about the world. c.
 - Their Gods and Goddesses and how they worshipped them. d.
 - 1. Characteristics of the Gods.
 - 2. The lesser spirits.
 - Achilles and the War Ogainst Troy. II.
 - Location of Troy. a.
 - Cause of the War between the Greeks and the Trojans. b.
 - How the war was carried on and the part taken by the c. Gods.
 - The activities of Achilles. d.
 - The activities of Hector. e.
 - f. How the Greeks finally took Troy.
 - Important characteristics of the Trojan War. g.
 - 1. Paris.
 - 2. King Priam.
 - 3. Menelaus.
 - 4. King, Agamemnom.
 - 5. Achilles.
 - 6. Hector.
- Sparta and Athens. III.
 - a. Location of Sparta and her relations with her enighbors.
 - Spartan training and its results. b.

- Location of Athens. e.
- d. Occupations of her people.
- Athenian culture. e.
- IV. The War of the Greeks and the Persians.
 - The extent of the Persian Empire. a.
 - The Greek cities on the Coast of Asia Minor. b.
 - Athens aids the rebellious Greek cities against the rule c. King Darius.
 - 1. Why Athens helped the Greek cities.
 - 2. Results of their sending aid.
 - Preparation for war. d.
 - e. Battle of Marathon.
 - Size of the Persian army at Marathon. 1.
 - 2. Why the Greek army was not larger.
 - 3. Commander of the Tthenians.
 - How the vistory was won. 4.
 - f. Xerxes renews the war.
 - 1. Description of Xerxes army.
 - 2.
 - 2. Crossing the Hellespont. The battles of Thermopylae and Salamis. g.
 - 1. The pass of Thermopylae.
 - 2. The heroism of Leonidas and his Spartans.
 - 3. How the Persians took the pass.
 - 4. The stratagy of Themistocles.
 - 5. The battle of Salamis.
 - 6. Why Xerxes gave up the war.
- V. Athens Under Pericles.
 - 1. The leadership of Pericles and the government of Athens.
 - 2. The description of Athens; the temples and statutes on the Acropolis.
- Socrates, the Philosopher. VI.
 - 1. Athens, the home of great thinkers.
 - 2:Socrates and the Oracle.
 - 3. Socrates' questions.
 - 4. The trial and death of Socrates.
- Alexander, the Great. VII.
 - 1. War between the Greek cities; their conquests by Philip of Mascedonia.
 - 2. Alexander's boyhood.
 - 3. How he managed the kingdom.
 - 4. His defeat of the Persians; his plan for his empire.
 - 5. Alexander's death.
- VIII. Spread of Greek Culture.
 - Influence of the Greeks on the world today. 1.
 - 2. How Greek culture was spread.
 - a. Greek cities on the Mediterranean coast.
 - b. Founding of Greek cities in the East.
 - 3. Alexandria, a center of Greek culture.
 - a. Its commerce and wealth.
 - b. Its schools and libraries.
 - Roman conquests of Greek cities. 4.
 - a. Romans adopt Greek culture.
 - IX. Early Days of Rome.
 - The Peninsula of Italy. 1.
 - a. Its location, form, climate, civilization, rivers, and early towns and people.
 - Rome, its location and the stories of its founding. 2.
 - a. Romulus and Remus.
 - 3. Growth of Rome under the kings.
 - 4. The establishing of a Republic.
 - a. Its government.
 - b. Horatius at the Bridge.
 - Two classes in Rome, Plebeans and Patricians. 5.
- Rights denied the Plebeans. a.
- Their struggle for full citizenship. b.
- X. Rome's Wars with Her Neighbors.
 - 1. The attack of the Aequians.
 - 2. Cincinnatus appointed as Dictator.
 - a. Cincinnatus rescues the army.
 - His orders, marches, the army's rescue. b.
 - 3. The Aequians Pass under the yoke.
 - 4 Cincinnatus lavs down his power.
 - a. The American society of Cincinnati.b. The City of Cincinnati.
- Iome's Wars with Carthage. XI.
 - 1. Location of Carthage; its sea power, its rivalry with Rome.
 - 2. Hamilcar and his son Hannibal.
 - a. The oath of Hannibal.
 - 3. Hannibal's plans.
 - His march through Gaul.
 - b. How he crossed the River Rhone.
 - c. Difficulty in crossing the Alps.
 - 4. Hannibal's success in Italy.
 - a. Battle of Cannae.
 - How the Roman generals fought Hannibal. h.
 - Cause of Hannibal's failure in Italy. 5.
 - His recall to Africa.
 - b. Defeat of Carthage at Zama; terms of peace.
 - c. Hannibal's death.
 - Destruction of Carthage. 6.

a. Rome rules over the whole Mediterranean World. XII. Rome and the Mediterranean World.

- Roman Territory. 1.
 - Spain, Africa, Sicily, the Islands of the Meditera. ranean, Greece, Macedonia and Asia Minor.
- 2. Why Roman rule spread.
- a. Public improvements.
- Building of aqueducts, bridges, public buildings. 1. b. Roman roads.
- 1. Construction of Roman roads.
- 2. Importance of good roads.
- 3. All roads lead to Rome.
- 4 Wealth obtained through conquests; Triumphal Procession
 - a. Effects of the conquests on the Roman Generals.
 - b. On the common soldiers.
 - On the Roman government. c.
- XIII. Romans in the West.

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- 1. Julius Caesar.
 - a. Early life and military training.
 - b. His adventures with the Pirates.
 - c. His popularity.
- 2. Caesar's election to the Counselorship.

a. He is made governor of Gaul.

- His conquest of Gaul. 3.
- 4. Caesar and the Teutons; his two invasions of Britain.
- 5. Roman rule and civilization introduced into the West.

Rome, the Capital of an Empire. XIV.

- The failure of the government at Rome.
 - a. Caesar becomes master of Rome.
- The enemies of Caesar and his murder. b.
- 2. The empire established by Augustus.
- 3. Public life of the Romans.
 - Public games.
 - 1. Chariot Races.
 - 2. Wild beast fights.

- Gladatorial Combats. 3.
- Daily life of the Romans. b.
 - Interior arrangement of a Roman house with 1. furniture.
 - 2. Education of a Roman boy; the "Boyish Toga"; the "Manly Toga".
- XV. Rome and Christianity.
 - Beginnings of the Christian Religion. 1.
 - a. How Rome regarded the Christmas.
 - 2. Christian laws under the Roman rule; the spread in the empire.
 - 3. Christian persecutions under Nero.
 - The Catacombs. a.
 - Christian Martyrs, Polycarp. Effect of the persecutions. b.
 - C.
 - 4. Organization of the church.
 - a. Priests, Bishops, Arch-bishops, and Popes. 5.
 - The rise of the Monostaries.
 - a. Hermits and Monks.
- XVI. The Ancient Teutons.
 - 1. Relation of the ancient Teutons to modern people; where they lived.
 - a. Their personal appearance.
 - b. Their lack of civilization.
 - 2. Teutonic manner of living.
 - a. Clothing, houses. occupations.
 - 3.
- Teutonic manner of fighting. a. Relation of the leader to his followers.
 - b. Warlike habits of the Teutons.
 - 4. Their government and their religion.
 - a. Readiness to learn of other people.
- XVII. The Teutons Invade the Roman Empire.
 - Weakness of the Roman Empire, division into east and 1. west.
 - 2. The Teutons as heirs to the Romans.
 - The first invaders; Goths on the Danube. 3.

a. Their conversion to Christianity.

- 4. The coming of the Huns.
 - The flee of the Goths into the Empire. a.

b. Battle of Adrianople and its results.

- 5. The character of Alaric.
 - His invasion into Italy. a.
 - b. The sack of Rome.
 - The death of Alaric. c.
 - The Goths settle in Spain. d.
- Other Teutons enter the Roman Empire. 6.
- 7. Fall of the Roman Empire; the end of ancient history.
- The middle ages; the meaning of the term. 8.
- 9 The Franks in Gaul.
 - What Clovis did for them. a.
 - Conversation of the Franks. b.
 - C. Extent of Clovis' kingdom.
 - d. Relations of the Franks and Romans.
 - e. Gaul becomes France.

XVIII. The Reign of Charlemagne.

- The importance of Charlemagne's reign; what he did for 1. the Franks.
- 2. Personal appearance of Charlemagne.
- Charlemagne's wars. 3.

 - a. War with the Saxons.b. War with the Lombards.
- Charlemagne crowned emperor at Rome. 4.
 - a. Extent of Charlemagne's empire.

- b. Nature of Charlemagne's empire.
- c. Importance of the revival of the empire in the west. 5. Development and progress under the reign of Charlemagne.
 - a. What Charlemagne did for Education.
- 6. Empire after the death of Charlemagne.
 - a. Break-up of Charlemagne's empire.
 - b. The permanent results of his work.
- XIX. The Founding of England.
 - 1. Where the English came from; their liking for the sea; how they first came to Britain.
 - 2. The conquest of Britain.
 - a. The legends of King Arthur.
 - b. What became of the Britains.
 - 3. The seven English kingdoms.
 - a. England's local government.
 - 4. The disappearance of Roman civilization and Christianity from England.
 - a. Gregory's interest in England.
 - b. The coming of Augustine.
 - c. Conversions of the English.
 - d. What the Monks did for England.
 - 5. The union of England under the king of Wessex.
 - XX. King Alfred and the Northmen.
 - 1. Where the Northmen or Danes came from.
 - a. Founding of Normandy.
 - b. The voyage to the west.
 - c. Discovery of Vinland; what Leif Ericsson had really discovered.
 - 2. Danish attacks upon England.
 - 3. Alfred the Great.
 - a. Warfare with the Danes.
 - b. Alfred's victories and treaties.
 - 4. What Alfred did for England.
 - a. Rebuilds London.
 - b. Strengthens the government.
 - c. Aids industry and learning.
- XXI. The Normans Conquer England.

3..

- 1. The weakness of England and the strength of the Normans.
- 2. The Normans invade England.
 - a. Battle of Hastings.
 - b. William, the Conquerer, becomes king.
 - The Feudal System established in England.
 - a. The meaning of "fief", "vassal", "homage", 'fealty".
 - b. What the lord owed to the vassal.
 - c. What the vassal owed to the lord.
 - d. How William prevented the lords from becoming too powerful.
- 4. The benefit upon England of the Norman conquests.

XXII. King John and the Great Charter.

- 1. The character of King John.
 - a. Sixth king of England who followed William the Conqueror.
 - b. One of the worst rulers that England ever had.
 - 2. Cause of John's quarrel with the Pope.
 - 3. John's struggle with his Barons.
 - 4. The Great Charter granted.
 - a. John renews the quarrel.
 - b. Importance of the Great Charter.

XXIII. The Rise of Parliament.

1. Early English assemblies.

- The difference between the early assemblies and Parlia-2. ment.
 - Representatives first used in local affairs. a.
 - Representatives added to the Great Council. b.
- Two sorts of representatives in Parliment. Separation of Parliament into two houses. 3.
- 4.
 - The house of Commons. a.
 - b. The house of Lords.
 - c. Parliament not yet supreme.
- The framework of the representative assembly which is to 5. be carried into all the great English Colonies.
 - a. The form used in all self-governing countries.
- Life of the Middle Ages. XXIV.

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- The place of the castle in the life of the middle ages.
 - Plan of a Norman castle. a.
 - b. The entrance; outer court; inner court.
 - The keep of the castle. C.
 - A castle in time of peace. d.
 - 1. The great hall.
 - 2. Dwellers in the castle.
 - Training for Knight-hood, the Page, the 3. Squire.
 - Amusements of the castle folk; falconry, hunt-4. ing with hounds.
- The conferring of Knight-hood. 2.
- Life in the Villages.
 - Three classes of society in the middle ages. 1.
 - 2. How the Knights were supported.
 - 3 Position of the Peasants.
 - a. The lords domain and the common lands.
 - b. The peasant's payments to their lords.
 - The services which they owed him.
 - Life of the Peasants in the villages. 4.
 - a. Their houses, furniture, food, and clothing. b. Contempt of the nobles for them. Life in the Medieval Tonwns.
- XXVI.
 - 1.
- The decay of the towns under the Teuton rule. a. The Teutons had never lived in cities in their old homes
 - Revival of town life in the 10th, 11th, and 12th centuries. 2. a. The towns in Italy, Germany, and France.
 - What the towns did for the world. b.
 - Privileges of the towns. 3.
 - Their rights of self-government. a.
 - Struggle within the towns. b.
 - Their independence finally lost. c.
 - Life in the towns. 4.
 - The streets, houses, shops. a.
 - The workmen, the apprentices, the guilds. b.
 - The cathedrals. c.
 - The Great Fairs of the middle ages. 5.
 - The Church of the Middle Ages.
 - Power of the church in the middle ages. 1.
 - Its organization. a.
 - Pope, Arch-bishop, and Bishop, Priests. 1.
 - Why men became Monks. 2.
 - The rule of St. Benedict. a.
 - The dress of the Monk. h.
 - c. Friars and Nuns.
 - The Monasteries, buildings and lands. 3.
 - a. Plan of a monastery.
 - Life of the Monks. 4.
 - a. Hours for worship.

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XXV.

- b. Labors of the Monks.
- c. His service to education.
- Three vows taken by a Monk. a. Enforcement of the rules. 5.

 - Method of becoming a Monk. b.
- Pilgrimages of the Middle Ages. XXVIII.
 - Why pilgrimages were made. 1
 - Places to which pilgrimages were made. a.
 - b. Pilgrimages over seas, difficulties and dangers.
 - Dress of the Pilgrims; what they carried, how they traveled, and where they were entertained. 2.
 - Completion of a pilgrimage. 3.
 - a. Medals and palm branches.
 - b. Influence of the pilgrimages.
 - 4. Why men went on pilgrimages.
 - The effect of the rise and spread of Mohammedanism 5. upon pilgrimages.
 - XXIX. The First Crusade.
 - 1. Preparation for the first crusade.
 - Pope Urban calls a crusade. a.
 - "Peter, the Hermit", and "Walter, the Pennyless", b. set out.
 - C. The crusaders reach Constantinople after crossing into Asia Minor.
 - The crusaders before Jerusalem and the fall of the d Holy City.
 - The treatment of its defenders. 1.
 - The crusaders' vow fulfilled. 2.
 - XXX. The Crusade of Richard the Lion-Hearted.
 - 1. How the crusaders organized their conquests.
 - 2. How Palestine was protected against the Mohammedans.
 - 3 Character of Richard the Lion-Hearted.
 - a. Route taken by Richard and Philip.
 - b. Why the crusade failed.
 - Richard's captivity, ransom and death. c.
 - Object of the fourth crusade. 4.
 - a. Directed against the city of Constantinople.
 - Result of the fourth crusade. b.
 - Venice becomes the chief center of trade between c. Asia and Europe.
 - 5. Ending of the crusading movement.

Why the crusading movement came to an end. a.

XXXI. Results of the Crusade.

- Introduction of new products; manufacturing and inven-1. tions from the east.
- 2. The love of travel.
 - a. The effects of travel on the minds of men.
- 3. Increase in trade.
- Growth of cities. 4.
- The growth of Venice as a trade city. 5.
- Rivalry of Venice and Genoa. 6.
- The geography of Asia came to be better known. 7. Travels of the Polo Brothers. a.
- All Europe Interested in Explorations and Discoveries.
 - Gutenberg's invention of printing and its results. 1.
 - 2. Portugal's part in the work of discoveries.
 - a. Prince Henry, Vasco da Gama.
 - 3. Voyages of Columbus.
 - Successors to Columbus. 4.
 - a. John Cabot discovers North America.
 - Balboa discovers the Pacific ocean. b.
 - c. Magellan's voyage and what it accomplished,

XXXII.

See the second

XXXIII. Spanish Conquests in America.

- Cortes leads an expedition to Mexico. 1.
- Spain governs Mexico. 2.
- The conquest of Peru. 3.
- Ponce de Leon discovers Florida. 4.
- De Sota discovers the Mississippi. 5.

Europe's Rivalry in the Colonization of America. XXXIV.

- 1. English sailors attack Spain in the new world.
 - 2. French rivalry with Spain.
 - The Dutch revolt against Spain. 3.
 - 4. English defeat the Spanish Armada.
 - English colonization begins. 5.
 - a. Sir Walter Raleigh's attempts at colonizing.

Seventh Grade

The history in 7B, 7A and 8B is based upon Beard and Bagley, "History of The American People".

I.* The Old World Background.

- A. Our debt to the Old World.
 - Conditions in Europe in the fifteenth century. Β.
 - Differences between eastern and western Europe. 1.
 - Social classes in Europe; peasants; artisans; traders 2.
 - and merchants; the clergy; nobles; kings. Development of trade; sea-route to Asia.
 - 3.

II.* Early Explorations and Conquests.

- A. The explorations of the Italians and the Portuguese.
- Columbus, Da Gama, Vespucci, Balboa, and Magellan. Β.
- Spanish conquests in North and South America. С.
- D. Early French explorations.
- Early English explorations. E.
- F. The conflict between England and Spain.
- The Settlement and Development of the Colonies. III.

European conditions which led to American colonization. Α.

- Religious changes. 1.
- 2. The cruel treatment of the peasants.
- 3. The development of the art of printing.
- The new supply of gold from the Spanish posses-4. sions.

The English colonies. Β.

- The colonies first settled by English immigrants. 1.
 - a. Virginia.
 - The New England colonies; Plymouth; Mass-chusetts Bay; Connecticut; New Hampshire. Maryland; Pennsylvania; the Carolinas; b.

 - c. Georgia.
- 2. Other settlements that become English colonies:
- New ork; New Jersey, Delaware. 3
 - Types of settlers in the English colonies.
 - a. Immigrants seeking religious freedom.
 - b. Immigrants seeking relief from poverty.
 - c. Involuntary immigrants—slaves and criminals.
 - d. Bond servants.
- The French settlements and colonies. С.
 - The settlements at Quebec, New Orleans, and St. 1. Louis.
- The struggle between the French and the English for the D. control of the continent.
 - 1. Differences between the French and English colonial policies.
 - 2. The three early colonial wars.

**Headings I and II are for the purpose of a hasty review.

The final struggle; the French and Indian War in 3. America; the Seven Years' War in Europe.

4. The Treaty of Paris and its results.

The Spanish colonies in Louisiana and the Southwest. E.

F. Russian settlements in the Northwest.

Important names which should be remembered in connection with one or more of the above topics:

Explorers: Columbus, Da Gama, Magellan, Balboa, DeSoto, Coronado, Verrazano, Cartier, Champlain, Marquette, LaSalle, Hudson, Cabot, Raleigh.

Colonial Pioneers: John Smith, William Bradford, John Endicott,

Roger Williams, Thomas Hooker. Proprietors and Governors: Penn, Baltimore, Berkley, Carteret, Lord De la Ware, Oglethorpe, Stuyvesant, Sir Edmund Andros.

Soldiers: Standish, Washington, Braddock, Wolfe, Montcalm.

Important dates: 1492; 1497; 1498; 1519-22; 1588; 1607; 1619; 1620; 1754: 1763.

British sovereigns during the periods of exploration, settlements, and colonization:

Henry VII, 1485-1509. Henry VIII, 1509-1547. Edward VI, 1547-1553. Mary, 1553-1558. Elizabeth, 1558-1603. James I, 1603-1625. Charles I, 1625-1649. Charles II, 1660-1685. James II, 1685-1688. William and Mary, 1689-1694. William III, 1694-1702. Anne, 1702-1714. George I, 1714-1727. George II, 1727-1760.

Puritan Revolution and Cromwell, 1649-1660 George II, 1760-1820. The Condition of the Colonies on the eve of the Revolution. IV.

- - Elements of strength in the colonies. A
 - The development of the spirit of independence and 1. self-reliance.
 - 2. The growth of the population.
 - The development of farming. 3.
 - The beginnings of manufacturing. 4.
 - a. Manufacturing in the home.
 - The iron industry. b.
 - c. Shipbuilding.
 - The development of trade and commerce. 5.
 - 6. The principal cities.

Β. Differences between the North and the South.

- Differences in surface and climate and their relation 1. to differences in social life and customs.
 - Local self-government in New England, the town as 2. the unit of government.
- 3. The larger units of government in the middle colonies.
- The county as the unit in the South. 4.
- Likenesses between the North and the South. С.
 - Few differences in language, religion, and laws. 1.
 - Representative government common to both sections. 2.
- Education in the colonies. D.
- V. Causes of the American Revolution.
 - The attempt of England to control American trade. A.
 - 1. Objectionable laws enforced by England after the Seven Years' War.

- Other objectionable policies of England. 2.
 - The decree limiting westward expansion. a.
 - b. The Stamp Tax.
- The protest of the colonies against taxation without rep-В. resentation.
 - Patrick Henry's speech. 1.
 - The Stamp Act Congress. 2.
 - The Stamp Act repealed. 3.
- More vigorous protests following the passage of the C. Townshend Acts.
 - The Boston Massacre. 1.
 - 2.
 - The Boston Tea Party. The First Continental Congress. 3.
 - English friends of America: Pitt and Burke.
- The War for Independence. VI.

D.

- The beginning of the struggle. A.
 - Lexington and Concord. 1.
 - The Second Continental Congress. 2.
- The northern campaigns. Β.
 - The siege of Boston and the battle of Bunker Hill. 1.
 - Washington assumes command of the army. 2.
 - Crown Point and Ticonderoga. 3.
 - The evacuation of Boston by the British. 4.
 - The Quebec expedition. 5.
- The Declaration of Independence. С.
- The Middle states campaigns. D.
 - Occupation of New York City by the British forces. Washington's retreat through New Jersey. 1.
 - 2.
 - The battles of Trenton and Princeton. 3.
 - Occupation of Philadelphia by the British forces. 4.
 - The winter at Valley Forge. 5.
 - The Burgoyne expedition: Bennington and Sara-6. toga.
- The French alliance. E.
- The southern campaigns. F.
 - Capture of Savannah and Charleston. 1.
 - Cornwallis's campaign in the South. 2.
 - a. Camden.
 - King's Mountain and Cowpens. b.
 - Guilford. c.
 - The siege of Yorktown and the surrender of Corn-3. wallis.
- The war at sea: John Paul Jones and John Barry. G.
- The war in the Mississippi Valley: George Rogers H. Clark's expedition and the capture of Vincennes.
- The Treaty of Paris. I.
- Some of the causes of American success in the war. J.
 - Washington's character, skill, and leadership. 1.
 - Franklin's diplomacy. 2.
 - The work of Robert Morris in financing the war. 3.

4. The work of the women. The "Critical Period" between 1781 and 1789; the Constitution. Government under the Continental Congress during the Α. Revolution.

- The Articles of Confederation proposed (1777) and B. adopted (1781).
- New constitutions of the states and their principal pro-C. visions.
- Government under the Articles of Confederation. D.
 - Discontent throughout the country: Shay's Rebel-1. lion.
 - The Ordinance of 1787, the most important legisla-2. tion under the Articles of Confederation.

VII.

E. The Constitutional Convention.

F. The Constitution.

- 1. Its compromises.
 - a. Between large and small states.
 - b. Regarding the counting of slaves in apportioning representatives.
 - c. Regarding commerce and the slave trade.
 - d. Regarding the direct share of the voters in the government.
- 2. Contrasts between the Constitution and The Articles of Confederation.
- 3. The four important powers of Congress.
- G. The adoption of the Constitution.

H. Washington the first President.

Important names:

Statesmen and Leaders in Civil Life. American English Patrick Henry. William Pitt. Samuel Adams. Edmund Burke. James Otis. Benjamin Franklin. Robert Morris. Thomas Jefferson. James Madison.

Alexander Hamilton.

American Washington. Greene. Gates. Schuyler. English Howe. Cornwallis.

French Lafayette. Rochambeau.

Important dates: 1765; 1775; July 4, 1776; 1777; 1778; 1781; 1783; 1787; 1789.

VIII. Starting the New Government.

- A. The first amendments.
- B. Hamilton's measures for financing the government.
- C. Opposition to Hamilton's measures: the Whisky Rebellion.
- D. The development of the political parties.
- E. Relations with Europe.
 - 1. Troubles with England due to the French Revolution: Jay's Treaty.
 - 2. Troubles with France.
 - a. The X. Y. X. Mission.
 - b. The "informal war" with France.
- F. Domestic probelms growing out of the French Revolution: The Alian and Sedition laws.
- The Expansion of the New Nation.
- A. The attitude of Jefferson's party toward western development.
 - B. The Louisiana Purchase.

IX.

- 1. Reasons for the purchase.
 - a. The desire for more land and for a free waterroute to the Gulf of Mexico.
 - b. The danger of French dominion in the West.
 - c. Napoleon's willingness to sell the territory.
- 2. Results of the purchase.
 - a. Criticism immediately following the purchase.
- b. Expeditions to explore the new territory.
- C. The Florida Purchase.
- X. The Organization and Settlement of the Middle West.

- Surrender by the older states of their claims to western Α. territory.
- Β. The organization of the Northwest Territory: the Ordinance of 1797.
- C. The organization of the region south of the Ohio.
- D. The gateways to the West and the four eras of travel. E. The settlement of the Middle West.
- 1.
 - The settlement of the region south of the Ohio. 2.
 - The settlement of the region north of the Ohio. 3. The movement down the Ohio and Mississippi.

 - The National Road and its effect upon settlement. 4.
- F. The new states.
- The life of the people on the frontier. G.
- XI. The Events Leading to the War of 1812 and to the war Itself. Events leading to the war. Α.
 - War between England and France and its effect on 1. American commerce.
 - 2. Attempts by Congress to remedy the situation.
 - The Embargo Act and its results. a.
 - b. The non-Intercourse Act.
 - 3. The impressment of American seamen.
 - The Chesapeake affair. 4.
 - B. The War of 1812.
 - The declaration of war. 1.
 - 2. The attitude of New England: the Hartford Convention.
 - 3. American disasters on land.
 - The naval exploits. 4.
 - Jackson's victory at New Orleans. 5.
 - 6. The Treaty of Ghent.
 - C. Political results of the war.

XII. The Spanish-American Republic and the Monroe Doctrine.

- A. The Spanish colonies win their independence.
- Β. The Holy Alliance formed: the danger of this alliance to the U.S.
- The Monroe Doctrine. C.

Important Names:

Presidents: Washington (1789-1797), John Adams (1797-1801), Jefferson (1801-1809), Madison (1809-1817), and Monroe (1817-1825). Political Leaders: Alexander Hamilton and John Jay. Military and Naval Leaders: Oliver Hazard Perry and Andrew Jack-

son.

Pioneers and Explorers: Daniel Boone, Meriwether Lewis, William Clark, and Zebulon Pike.

European Leader: Napoleon Bonaparte.

Important dates: 1803; 1812; 1823.

XIII.

Political Development between 1815 and 1845.

- Important political issues of the period. Α.
 - The protective tariff. 1.
 - 2. Internal improvements.
 - 3. The sale of public lands.
 - The United States Bank. 4.
- Political leadership. B.
 - The administrations of James Monroe and John 1. Quincy Adams.
 - 2. Andrew Jackson's administration.
 - 3. Webster, Hayne, Clay, and Calhoun.
 - The rise of the Whig party.
 - The campaign of 1840; Harrison and Tyler. 1.
 - 2. Tyler's unpopularity: the Ashburton Treaty.

XIV. The Settlement of the Territory West of the Mississippi.

- Α. Missouri, Arkansas, and Iowa.
- B. The Texas problem: the admission of Texas.

- The War with Mexico: Cause, Campaigns and Terms of Peace. XV. XVI. The Settlement of the Far Western Country.
 - Oregon, California, and Utah. A.
 - B. Summary of the far western movement. The Industrial Revolution.
- XVII.
 - Α. England's early leadership in industry.
 - Β. The development of manufacturing in America.
 - The cotton industry: the cotton gin. 1.
 - 2. The woolen industry.
 - 3. The invention of the sewing machine.
 - The iron industry: development in Pennsylvania. 4.
 - The development of farm machinery. С.
 - Means of transportation and communication. D.
 - 1. Canals.
 - 2. The steamboat.
 - 3. The railroad.
 - 4. The express business.
 - The telegraph: the Atlantic cable. 5.
 - 6. Ocean navigation.
- The Effect of the Industrial Revolution upon American Life. XVIII
 - The division of labor and the separation of the worker A. from his tools.
 - Β. Women in the factories, child labor.
 - С. Immigration stimulated to bring new supply of labor.
 - D. The labor movement.
 - E. The growth of the cities.
 - F. Foreign trade.
 - The South and the industrial revolution. G.
 - XIX. The Growth of Political Democracy.
 - The struggle for universal manhood suffrage. Α.
 - Β. The struggle for women's rights.
 - The Development of Popular Education in the First Half of XX. the Nineteenth Century.
 - The religious character and purpose of colonial schools. A.
 - Β. The removal of the schools from the control of the church.
 - С. The development of free elementary schools.
 - The development of high schools. D.
 - The development of higher education; state universities. E.
 - G. The development of the newspapers, magazines, and political pamphlets.
 - The early American novels, American poetry. H.

Important Names:

Presidents: John Quincy Adams (1825-1829), Jackson (1829-1837), Van Buren (1837-1841), Harrison and Tyler (1841-1845), and Polk (1845-1849).

Other Political Leaders: Clay, Webster, Calhoun.

Pioneers: Moses Austin, Marcus Whitman, Brigham Young.

Inventors: Slater, Whitney, Fulton, Howe, McCormick, and Morse. Educational Leaders: Mann, Barnard, Clinton, Mary Lyon and Emma Willard.

Labor Leaders: Robert Owen and Frances Wright.

Writers: Paine, Cooper, Irving, Hawthorne, Poe, Bryant, Longfellow, Whittier. Lowell, and Harriet Beecher Stowe.

Military Leaders: Taylor and Scott. Important dates: 1846-1848.

Slavery Becomes a National Problem. XXI.

- A. Constitutional provisions regarding slavery.
 - Abolition of slaves in the Northern states. **B**.
- The "balance of power" between the slave states and the С. free states.

Events Leading to the War Between the States. XXII.

The Missouri Compromise. A.

The abolition movement and its leaders. **B**.

- С. The development of cotton raising in the South.
- D. The Compromise of 1850.
 - 1. California admitted as a free state.
 - 2. The Fugitive-slave Law: the "Ungerground Railroad".
- The Kansas-Nebraska Act. E.
 - 1. The Republican party organized.
 - 2 Border warfare in Kansas.
 - The Dred Scott Decision.
- G. The Lincoln-Douglas debates.
- H. John Brown's Raid.

The Political Situation on the Eve of the Civil War.

- The tariff and homestead issues. Α.
- The rise of Lincoln. Β.
- C. The division in the Democratic party.
- D. The political campaign of 1860: Lincoln elected. The Civil War.

XXIV.

F.

- The Secession of seven Southern states and the organiza-Α. tion of the Confederate States of America.
- Divided opinion in the North: the proposed Crittenden B. Compromise.
- C. Lincoln's first inaugural.
- D. Fort Sumter surrendered.
 - 1. The North aroused.
 - 2. Four additional states join the Confederacy.
- Preparations for war: relative advantages of the North E. and South.
- The campaigns of 1861 and 1862. F.
 - Early Union reverses in the East.
 Union successes in the West.
- The Emancipation Proclamation. G.
- H. The War on the water.
- The campaigns of 1863. Ι.
 - 1. Renewed disasters in the East.
 - 2. The battle of Gettysburg.
 - 3. Vicksburg surrendered.
 - The battles of Chickamauga and Chattanooga. 4.
- J. The campaigns of 1864 and 1865.
 - 1. Grant in command of all Union armies.
 - Sherman's march. 2.
 - 3. Grant in Virginia.

Κ. The assassination of Lincoln.

- The cost of the war. L.
- M. Women and the war.

Reconstruction in the South. XXV.

- Problems of reconstruction. A.
- The Fourteenth Amendment to the Constitution. Β.
- Military rule in the South and its consequences. С.
- The struggle between President Johnson and Congress: D. the impeachment, trial, and acquittal of Johnson. The campaign of 1869: Grant elected.
- E.
- F. The Fifteenth Amendment.
- The rule of the "carpet-baggers"; the Ku Klux Klan. G.
- H. Laws depriving the negro of the vote.

Important Names:

Presidents: Taylor and Fillmore (1849-1853), Pierce (1853-1857), Buchanan (1857-1861), Lincoln (1861-1865), Lincoln and Johnson (1865-1869), Grant (1869-1877).

Other Political Leaders: Davis, Douglas, Garrison, Fremont, Seward, Alexander H. Stephens, Greeley.

Military and Naval Leaders: Grant, Lee, Sherman, McClellan, "Stonewall" Jackson, Sheridan, Johnston, Farragut, Meade, Hooker, Thomas, Early.

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XXIII.

İmportant dates: 1820; 1850; 1854; April 14, 1861; January 1, 1863; July 1-3, 1863; April 9, 1865.

- XXVI. The Rise of the New South.
 - A. The situation at the close of the Civil War.
 - B. The reconstruction of the planting system.
 - C. The development of farming.
 - D. The industrial Revolution in the South.
- XXVII. The Growth of the Far West.
 - A. The Far West in 1860.
 - B. New Western states and territories.
 - C. The problem of the public land.
- XXVIII. The Triumph of Industry.
 - A. The development of mining and manufacturing.
 - B. The development of transportation: railroads and ships.
 - C. The army of industry: inventors, business men, wage earners.
 - D. The results of industrial development.
 - 1. Development of the export trade.
 - 2. Disappearance of the frontier.
 - 3. Business and industry gain on farming.
 - 4. The growth of the cities.
 - 5. Evils of industrial development.
 - XXIX. Immigration.
 - A. Principal sources of immigration before 1890.
 - 1. Early immigration.
 - B. Later changes in immigration.
 - 1. The influx from Southern Europe.
 - 2. Settlement of immigrants in the cities.
 - 3. The enormous increase in immigration.
 - 4. Many immigrants not permanent.
 - C. Efforts to restrict immigration.
 - XXX. Combinations of Capital and Labor.
 - A. · Competition leads to the formation of "trusts".
 - B. The results of combinations of capital.
 - 1. The "soulless" corporation.
 - 2. Protective organizations of employees.
 - 3. Employers' organizations.
 - C. The great strikes.
 - D. The rise of Socialism.

XXXI. Parties and Political Issues.

- A. The Republican and Democratic parties.
- B. The tariff and income-tax issues.
- C. The currency problem.
- D. Other political problems and issues.

XXXII. Foreign Affairs.

- A. Controversies with Great Britain.
- B. Controversy with Germany over Samoa.
- C. The Hawaiian question.
- D. The growth of foreign trade.
- XXXIII. The Spanish-American War and the Boxer Difficulties.
 - A. The Cuban revolt and the destruction of the Maine.
 - B. The war with Spain.
 - C. The results of the war.
 - D. Military activities in China.
 - E. Imperialism a political issue.
- XXXIV. Advances in Popular Education.
 - A. Development of schools and colleges.
 - B. The growth of vocational education.
 - C. Educational extension.
 - D. The higher education of women.
 - E. Other educational agencies.

Important Names:

Presidents: Johnson, 1865-1869; Grant, 1869-1877; Hayes, 1877-1881;

Garfield and Arthur, 1881-1885; Cleveland, 1885-1889; Harrison, 1889-1893; Cleveland, 1893-1897; McKinley, 1897-1901. Other Political Leaders: Tilden, Blaine, Bryan. Inventors: Edison, Bell, Wilbur and Orville Writht.

Labor Leaders: Debs, Gompers.

Leaders of Business and Industry: Rockefeller, Carnegie, Morgan.

Military and Naval Leaders: Dewey, Sampson, Schley, Shafter.

Important dates: 1877, 1894, 1898.

XXXV. The New Democracy.

- A. Causes of the increasing interest in the machinery of government.
 - 1. Popular education.
 - 2. Wrong doing on the part of public officers.

3. Criticism of faithless officials.

4. Problems of the cities.

5. The education and employment of women.

Political reforms. Β.

- Civil-service reform. 1.
 - 2. Ballot reform.
 - 3. The initiative, referendum, and recall.
- 4. The "commission" form of city government.
- 5. The "city-manager" plan.
- 6. Reforms in the organization of political parties.
- 7. The direct primary.
- 8. Woman suffrage.

The Early Years of the Twentieth Century.

A. Roosevelt a new type of president.

- Β. The conservation movement.
 - 1. Its leaders.
 - 2. The reclamation Act.
 - The Forest Reserves. 3.
- С. The Panama Canal.
 - 1. Early history.
 - 2. Treaty with Great Britain.
 - Dispute over routes. 3.
 - 4. The Panama "revolution" and the cession of the Canal Zone.

5. The building and opening of the canal.

- Foreign affairs. D.
 - 1. The Treaty of Portsmouth.
 - 2. The journey of the fleet around the world.
- E. The election of 1908.
- F Taft's administration.
 - 1. Tariff revision and the income tax.
 - 2. Postal savings banks.
 - 3. The parcel post.
 - 4. Dissolution of the "trusts". The campaign of 1912.
- G.
 - 1. Dissatisfaction with Republican rule.
 - 2. The organization of the Progressive party.
 - 3. The nomination of Woodrow Wilson by the Democrat.s
- H. Wilson's first administration.
 - New laws: tariff, income tax, anti-trust, Federal 1. Reserve banks.
 - 2. Troubles with Mexico.
 - a. Civil war in Mexico.
 - b. The Vera Cruz expedition.
 - c. The difficulties with Villa.
 - 3. American protectorates in Haiti and San Domingo.
 - 4. The purchase of the Virgin Islands.
- The Great War.

A. Europe on fire.

XXXVII.

- XXXVI.

- B. American neutrality.
 - 2. Reasons for American neutrality.
 - 1. The President's proclamation.
 - Difficulties in the way of strict neutrality. 3.
- C. The submarine outrages.
 - The Lusitania torpedoed and sunk. 1.
 - America's protest and Germany's agreement to 2. modify her practices.
- The campaign of 1918: President Wilson reelected. War with Germany and Austria. D.
- E.
 - Germany renews unrestricted submarine warfare. 1.
 - German intrigue in the United States. 2.
 - 3. War declared.
- F. The German Autocracy.
 - Nature of the German empire. 1.
 - 2.Prussia practically an absolute monarchy.
 - The Hohenzollern rule and its dreams of world dom-3 ination.
 - 4. The need of crushing German militarism.
- G. A democracy at war.
 - 1. The draft.
 - 2. War taxes.
 - National control of food, fuel, and transportation. 3.
 - Adjustment of industrial disputes. 4.
 - 5. Encouragement of ship building.
 - 6. Soldiers' insurance.
 - Americans on the high seas and on the battle front. 7.

Steps leading up to the armistice. 8.

Important Names:

Α.

Presidents: Roosevelt (1901-1909), Taft (1909-1913), Wilson (1913). Important dates: 1914; April 6, 1917; Nov. 11, 1918.

Eighth Grade

Elementary Social Science

The purpose of this course in the last half of the eighth grade is to develop an intelligent interest in the practical phases of social, civic and economic questions and to establish the point of view that will enable pupils to examine existing conditions and to consider the problems that they suggest.

- Some Elementary Economic Facts. T.
 - What we know about our wants.
 - 1. Individual wants.
 - 2. Community wants.
 - The satisfaction of economic wants. Β.
 - An opportunity to help in the production of wealth. 1.
 - 2. An opportunity to share in the wealth that has been produced.
 - Wealth and Poverty. C.
 - Wealth has to be produced. 1.
 - Possessions of wealth and ability to control the means 2. of production may lead to wealth.
 - Absolute lack of both makes for poverty. 3.
 - D. Agencies of production.
 - 1. Land.
 - 2. Labor.
 - 3. Capital.
 - 4. Management.
 - Man is wealthy because he can control one or more of 5. these agencies or is poor because circumstances do not permit him to do so.

- E. Property.
 - 1. Real Estate.
 - Personal Property.
- F. The economic ideal.
 - 1. The ideal economic community is that in which the general economic level is reasonably high rather than where some have great wealth and others are suffering extreme poverty.
- II. Land.
 - Private ownership of land. A.
 - 1. Deeds and titles.
 - 2. Free public lands.
 - Private ownership has hastened civilization. В.
 - 2. Has taught men how to live at peace with each other.
 - 3. Has helped to keep us more stable.
 - Private ownership in land brings wealth. C.
 - Sale. 1.
 - 2. Rental.
 - 3. Farming.
- Labor. III.
 - Α. Earning a living.
 - 1. Working for one's self.
 - 2. Working for an employer.
 - Β. Slave labor and free labor.
 - Free labor is labor given by one who is free to choose what he will do and for whom he will work. 1.
 - С. Employers and employees.
 - D. Rewards of labor.
 - 1. Opportunity to work.
 - 2. Increasing earning power.
 - 3. Leisure.
 - 4. Satisfaction.
 - 5. Safety in old age.
- IV. Capital.
 - Α. What is capital.
 - 1. Money not the same thing as capital.
 - 2.The use to which money is put determines whether it is or is not capital.
 - 3. Money is capital only when it is used in production or when it is available for production.
 - Β. The Capitalist.
 - 1. What is a capitalist.
 - 2. Popular conception of a capitalist.
 - 3. The right conception of a capitalist.
 - С. Capital as important as labor.
 - Capital and labor the two necessary elements of pro-duction should bear relation to each other such as we see in other pairs of words such as "friend and com-panion," "peace and plenty," "light and liberty," "safety and happiness," "union and strength." 1.
 - The power of capital must be highly regarded. D.
 - We must have as fair a distribution of wealth and 1. means of getting it as is possible.
 - 2. Need for cheaper money.
 - 3. The Federal Farm Loan Act.
 - The importance of saving. E.
 - 1. Capital means saving and investment.
- V. Management.
 - A. Why management is necessary today.
 - Representatives of management, representatives of labor, Β. representatives of capital.
 - C. Large industries and extensive business enterprises are

coming to be managed by representatives of capital and labor.

- D. Management through the control of money.
 - 1. By means of banks.
 - By means of stock companies.
- E. Management through control of market opportunities.
 - 1. By means of combination.
 - 2. By means of special priviledges.
- VI. The Modern Business of Production and Distribution.
 - Modern business-production. Α.
 - 1. Farming, mining, lumbering, grazing, fishing.
 - Manufacturing the finished product.
 - B. Distribution.
 - 1. Transportation.
 - 2. Selling to the consumer.
 - С. The modern farm.
 - Extensive farming-the farm equipment and co-oper-1. ation.
 - 2. Conditions of labor in extensive farming.
 - Intensive farming-Location and co-operation. 3.
 - 4. Intelligent labor needed-agricultural education profit
 - able.
 - A modern factory. D.
 - 1. The building and mechanical equipment.
 - 2. The employees.
 - 3. The product produced.
 - E. The railroads.
 - Financing the railroads. 1.
 - 2.
 - Interstate regulations. Interstate commerce commission. 3.
 - The common carrier. 4.
 - 5. Intra state regulations.
 - The modern department store. F.
 - 1. The building.
 - 2. The employees.
- VII. Some Elementary Social Facts.
 - The social sciences. Α.
 - 1.
 - Sociology. Political Science. 2.
 - 3. Economics.
 - 4. History.
 - Β. Society controls all for the benefit of all.
 - 1. Society must regard both the individual and the compensation of the individuals.
 - C.
- Methods of control. 1. Control by laws, customs and institutions. 2.
 - Society has two means for promoting its own welfare. a. Compulsion and persuasion.
 - Prevention of ignorance, poverty, disease and b. crime.
- VIII. Public Education-the Cure for Ignorance and Poverty. Α.
 - Universal education needed for democracy.
 - 1. Importance of literacy.
 - 2. Importance of ability to earn a living.
 - B. Compulsory.
 - 1. Compulsory school attendance.
 - 2. Child labor laws.
 - 3. Compelled support of public schools.
 - С. Education through persuasion.
 - 1. Public and private schools.
 - The elementary school. 2.
 - 3. The secondary school.
 - The evening school. 4.

- 5. The continuation school.
- Other means of free, public education.
 - 1. Libraries.
 - 2. Museums.
 - 3. Art Gallaries and exhibits.
 - 4. Extension departments.

Promotion of Public Health-a Cure for Diseases. IX.

- An ancient enemy. A.
 - 1. Disease.

D.

- B. Health and Democracy.
- 1. The necessity for health among all its members.
- Securing health by compulsion. С.
 - 1. Compulsory medical attendance.
 - 2. Compulsory segregation of diseases.
 - 3. Prohibition of acts that endanger public health.
 - 4. Proper maintainance of unsanitary conditions.
- D. Securing health by persuasion through health departments. Vital statistics. 1.
 - 2. Inspectors.
 - 3. Hospitals.
 - 4. Distribution of information.
 - Public health nurses. 5.
- E. State regulations.
 - The workman's compensation law. 1.
 - 2. Acceptable prevention. National health measures.
- F.
- G. Individual responsibility.
- Promotion of Morality—the Cure for Crime. A. Dealing with the wrong-doer. Χ.
 - - 1. Restraint and punishment.
 - Proper methods of punishment.
 - Β. Agencies for investigating the law.
 - 1. The courts.
 - 2. Police powers.
 - Reformation of the wrong doer. С.
 - Due to social and economic conditions. 1.
 - 2. Duty towards philanthropic organizations.
 - United Charities. a.
 - b. Children's aid societies.
 - National child aid committee. c.
 - d. Y. M. C. A.
- A Few Facts of Political Science.
 - Political Science. Α.
 - 1. A study of the principles of government.
 - Β. Constitutional rights.

 - The right of self government.
 The right of acquiring and holding property.
 - How society governs itself. С.
 - 1. Self government.
 - 2. Representative government.
 - 3. Federal government.
 - 4. State government.
 - 5. Local government.
 - The branches of government. D.
 - 1. The legislative department.
 - 2. The judicial department.
 - The executive department. 3.
 - E. Important functions of the government is to carry on the problems of the nation.
 - 1. Direct taxes.
 - 2. Indirect taxes.
 - 3. Federal taxes.

XI.

- 4. State and local taxes. F. An important feature of federal import customs.

 - Protective tariff.
 Tariff for revenue.
 Business and politics.

Bibliography

Allen, Frederick J., "Business Employments"Ginn & Company Ames and Eldred, "Community Civics"MacMillan American Community Leaflets, Bureau of Education No. 18
tistics—1917.
Fiske, Amos K., "The Modern Bank"
Fleming, Ralph D., "Railroad and Street Transportation" Cleveland Foundation Giles, "Vocational Civics"
Giles, "Vocational Civics"
Graves, Henry S., "The Profession of Forestry"
U. S. Department of Agriculture, Forest Service, Circular 207
Goodwin & Wheatly, "Occupations"
Hughes, "Community Civics"D. C. Heath
Kelly, R. M., "Hiring the Worker"
O'Leary, Iris P., "Department Store Occupations"Cleveland Foundation
Leavitt and Brown, "Elementary Social Science"
Smith, J. Russel, "Commerce and Industry"
Taylor, F. W., "The Principles of Scientific Management". Harper & Bros-
Towne, E. T., "Social Problems"
Williams, Archibald, "The Romance of Modern Mining"Seeley & Co.
Williams, Archibald, "The Romance of Modern Locomotion.

Reference Books in History

History of the United States (Text) The Story of American History Child Life in Colonial Days	Blaisdell
Elementary History of the United States	Gordy
Story of the Thirteen Colonies	Guerber
Colonial Days	Gordy
American Indians	Starr
Four American Indians	Whitney
Camps and Firesides of the Revolution	Hart
Stories of Useful Inventions	Forman
A History of the United States	Gordy
The Winning of the West	Roosevelt
Men Who Made the Nation	Spark
Expansion of the American People	Spark
American Colonial History	Ashley
A History of the United States	
Colonial Days in Old New York	Earle
How Our Grandfathers Lived	Hart
Source Book of American History	Hart
Documentary Source Book of American History	MacDonald
Old Francisian Missions of California	Anonymous
Source Book of American History Documentary Source Book of American History Old Francisian Missions of California A History of the United States	Thwarte and Kendall
O Short History of the United States	Dassell
Pioneers of Land and Sea	McMurry
Pioneers of the Rocky Mountains and the West	McMurry
Pioneers of the Rocky Mountains and the West	McMurry
Builders of Our Country	Southworth
Side Lights on American History	Elson
Story of the English	Guerber

Story of Modern France	Guerber
Hero Tales from American History	Roosevelt and Lodge
Up from Slavery	Washington, B. T.
Dawn of American History in Europe	Nida
History of the United States	Mace
Plain Tales from American History	Bassett
Commerce and Industry	J. Russell Smith

Bibliography

Home Economics

AIMS OF THE COURSE:

- To dignify the labors of the home. 1.
- 2. To teach the proper selection of materials used in the home.
- 3. To teach the wholesome and economical use of these materials.
- To establish sane standards of living including simplicity, 4. economy, cleanliness and forethought.
- 5. To conserve human life and energy.
- 6. To insure peace and happiness in the homes of the future if not of the present.

THE SCOPE OF THE WORK:

1. Clothing:

> The selection, purchase, making, repair, care, cleaning, and laundering of clothing.

- 2. Foods: The selection, purchase, preparation, cookery, serving, keeping, refrigeration and economic uses of foods, and the care of utensils.
- 3. Household Management:

The arrangement, use, care, furnishings and textiles for the kitchen, dining room, living room, bedroom and bath room.

- 4. Nursing.
- 4. Nursing:

The general care and feeding of children.

Principles of home nursing.

Diseases common to children.

Infant mortality.

- 5. Shelter or Housing: Principles of location, renting or building, heating, lighting, ventilation, plumbing, drainage, furnishigs. Persoal Hygiene: 6.
 - Care of skin, hair, eyes, nails. When, how much, and what food to eat, Digestion of food. Baths. Shoes. Hygiene of Clothing.

Physical Exercises.

TIME ALLOTMENT AND SYNOPSIS OF THE WORK:

Fifth Grade.

Subject Clothing:

- Making of simple articles. 1.
- 2. Care and repair of clothing.
- 3. Laundering articles made.
- 4. Personal hygiene.

Sixth Grade.

Domestic Science-Two days a week-50 minutes per day. Domestic Art-Three days a week-50 minutes per day.

"Clothing"-The thought centers about any of the following:

- A cooking outfit. A.
- A set of underwear. Β.

C. Articles for a bedroom. Subjects to be considered for the working out of "A", "B", and "C." 1.

- Selection and buying of appropriate material. 2. Suitability of styles.
- 3. Cost.
- Making. 4.
- 5.
- Care and repair.
- Laundering and removal of stains. 6.

*This outline prepared by Miss Elizabeth Clasbey, Assistant Professor Household Science, Colorado State Teachers College.

7. Hygiene of clothing. "Foods."

The problem centers about the preparation and study of foods adapted to simple suppers.

Subjects to be considered:

- 1. Foods suitable for the evening meal.
- 2. Buying and preserving of food materials.
- 3. Preparing cooking and serving of
 - a. Beverages
 - b. Frauits
 - c. Vegetables
 - d. Cereals
 - e. Eggs
 - f. Quick breads
 - Bacon or ham g.
- 4. Canning
- 5. Making supper menus.
- Serving type suppers, estimating cost per person. 6.

7. Visit markets.

"House Management."

The problem or project centers about a bedroom.

- Furnishings 1.
 - 8 Essential articles.
 - b. Suitability of style.
 - Arrangement. c.
 - d. Oppropriate decorative features.
- 2. Care.
 - Care and making a bed. a.
 - b. Ventilation.
 - Cleaning. c.
 - d. Dusting.
 - e. Care, order and arrangement of closet and bureau drawers.

Seventh and Eighth Grade (required in either the seventh or eighth).

Domestic Science-Two 50 minute periods per week.

Domestic Art-Two 50 minute periods per week.

"Clothing"—The problem centers about any of the following: A. Articles for night wear.

- B. A gynasium suit.
- С. Dress and accessories for school wear.
- Curtains and linens for the dining room. D.

E. O unit not used in Grade six.

Subjects to be considered in working out of "A", "B", "C", "D", "E".

- 1. Selection and buying of material.
- 2. Suitability of styles.
- 3. Study and use of patterns.
- 4. Making.
- 5. Care and repair.
- Laundering. 6.
- 7. Economic features.
- 8. Any unit not previously studied.

"Foods."

The problem or project centers about the study and preparation of foods adapted to simple luncheons.

Subjects to be considered:

- 1. Foods suitable for luncheon.
- Selection, buying and preserving of materials. 2.
- Preparing, cooking and serving of 3.
 - Soups a.
 - b. Meats
 - Vegetables c.
 - Salads d.
 - Breads е.

- f. Relishes
- g. Deserts
- Canning and preserving. Making luncheon menus. 4.
- 5.
- Serving type luncheons, estimating cost per person. 6.

"House Management."

The problem or project centers about the kitchen and bath room.

1. Furnishings.

- a. Essential articles.
- b. Practicability and efficiency.c. Arrangement.
- d. Appropriate decorative features.

2. Care.

- a. Ventilation.
- b. Cleaning.
- c. Dusting-Care, order arrangement of pantry linen closet and medicine cabinet.
- d. Care of plumbing.

"Child Nursing."

The problem or project centers about

- Foods of infants and children. 1.
- Clothing of infants and children. Rest and sleep of infants. 2.
- 3.
- Bathing.
 Cries—Exercise of infants.

Shelter or Housing:

The problem centers around

- 1. The principles of location.
- 2. Renting or building.
- 3. Heating-lighting.
- 4. Plumbing-drainage.
- 5. Furnishings.
- 6. Family burget.

At the end of three years the pupils should be able to buy, make, repair and care for most of her wardrobe; plan, buy and prepare simple meals; understand and assist in the care and management of the house; and assist in the care of infants, children, and invalids. This may be ac-complished by intensive work in clothing, foods, household management, nursing and housing.

Bibliography

Clark-"The Care of the House"-MacMillan.

Conn-"Bacteria, Yeast and Molds in the Home"-Ginn & Company. Cooley-"Domestic Art in Woman's Education"-MacMillan.

Kinne & Cooley—"Food and Household Management"—MacMillan. Kinne & Cooley—"Shelter and Clothing"—MacMillan.

Gulick—"The Body at Work"—Ginn & Company. Gordan—"The Principles of Human Nutrition"—MacMillan.

Holt—"Care and Feeding of Children"—Appleton. Richards—"The Cost of Living"—Wiley. Richards—"The Cost of Food"—Wiley.

Richards—"The Cost of Flotd — "Hey. Richards—"The Cost of Shelter"—Wiley. Richards—"The Cost of Cleanness"—Wiley. Richards—"The Art of Right Living"—Wiley. White—"The Fuels of the Household"—Whitcomb and Barrows.

Wilson-"Domestic Science in Elementary Schools"-U. S. Bureau of Education.

The work in the kindergarten is based on the seasons and festivals and the interests of the children. The children learn to play and work together, meeting the social instinct, which is so prominent between the ages of four and six. They are taught to do by doing, and thus form good habits for future years.

1. Music:-

The cultivation of musical feeling through simple vocal and instrumental selections. Rote songs for games, seasonal and incidental occasions; clear articulation and enunciation in speech and song. Recognition of simple music presented in different ways. 2. Literature and Language:----

Conversations relating to daily experiences of the child in the home, in the natural observations and excursions, with illustrations through pictures and objects. Teaching of correct English through conversation and stories. Stories possessing dramatic possibilities and literary value, including Mother Goose rhymes and jingles, short poems, fairy stories, animal stories, fables and realistic stories. These are carefully selected, suited to the age of the child, and may be orally reproduced.

3. Physical Exercises:-

Marching and rhythmic exercises.

Plays and games and dramatization.

Free play indoors and on the playground. 4. Nature Study:—

Excursions to different parts of the college campus, observations and use of nature materials, care of fish and plants, work in school garden and garden boxes for the windows.

5. Handwork:-

The use of plasticine and clay, water colors, crayola, chalk at the blackboard. Use of scissors and paste and paper folding. The use of hammers, learning to pound nails in wood, making a few real playthings.

Block Work:-6.

Use of Froebel's enlarged materials, use of some of the Montessori apparatus for the beginning classes. Use of Hill-Scheonhut floor blocks and wooden dolls. Use of miscellaneous blocks and materials which are adapted to the child. Use of sand-table.

BIBLIOGRAPHY.

Atwood, Nora, "Theory and Practice of the Kindergarten." Houghton-Mifflin Co.

Millin Co.
Blow, Susan E., "Education in the United States," edited by Nicholas Neway Brothers, Chapter on Kindergarten Education, A. B. C. Co.
Cook, Henry Caldwell, "The Play Way." F. A. Stokes Co.
Froebel, Friedrich, "Froebel's Chief Writings On Education." Rendered

Into English by S. S. F. Fleitcher and J. Welton. Longmans, Green and Company.

Fulmer, Grace, "The Use of Kindergarten Gifts." Houghton-Mifflin Co. International Kindergarten Union, U. S. Bureau of Education, Bulletin 1919, No. 16.

Palmer, Luella, Adjustment Between Kindergarten and First Grade. U. S. Bureau of Education, Bulletin 1915, No. 24.

Winchester, Amira, Kindergarten Education, U. S. Bureau of Education, Bulletin 1918, No. 49.

The Kindergarten. Reports of the Committee of Nineteen on the Theory and Practice of the Kindergarten. Houghton-Mifflin Co.

Manual Arts

There is practically no basis of commonly accepted theory or practice on which to form a course of study. In other words there is no common understanding of the purpose and no common practice of instruction in the manual arts as exists in most of the older academic subjects. At least eight different objectives should determine the work in manual arts:

- 1. To develop handiness.
- 2. To promote the immediate carrying over of ideas into action.
- 3. To help encourage special interests and aptitudes is important for vocational guidance.
- 4. To provide a means for developing technical skill.
- 5. To provide a means for imparting technical knowledge.
- 6. To enable the pupil to apply the test of practice to some of his thinking.
- 7. To interest in school work those pupils to whom the traditional studies do not appeal strongly.
- 8. To create interest in the arts and industries without any reference to their vocational significance.

WOOD WORK *

In this course it is assumed that the fifth grade is the beginning grade in this work but it is not to be taken as being the exact beginning for, in many instances, students who have had no previous woodworking, are taken into the other three grades.

Fifth Grade

In this grade the pupil is to get his first introduction in the art of handling tools and in the use of such materials as are used in the school shop.

The pupil is taught the names and uses of such tools as saws, planes, hammers, gauges, squares, chisels, etc.

Samples of some few of our common lumbers are introduced and the student is taught how to tell the different kinds of lumber shown.

The first lessons in handling tools embraces the use of such tools as saws, planes, try squares, gauges, chisels, etc. The first exercises should take up such work as the facing, jointing and squaring of medium sized pieces of lumber. After this has been accomplished to a fair degree some simple project can be introduced; these should consist of not more than from one to three pieces. For example: Such articles as pencil sharpeners, garden stakes, broom holders, spool holders, paper files, small shelves, etc. In some cases where the student is large and strong and shows the ability much more elaborate work can be taken up.

The student should be taught from the start to respect tools and to regard them as friends.

Practical Characteristics of Projects.

- 1. Processes must be varying.
 - 2. They must be simple and therefore easily comprehended and such as may be applied by the pupils themselves without too much technique and oversight by the teacher.
 - 3. The projects must be of such a nature that the pupils can judge readily as to the degree of excellence of the results attained.
 - 4. The projects must be such as can be completed in a reasonably short time.
 - 5. They must be such as can be designed or modified easily by the children themselves so that each pupil may have what amounts to an individual problem.

*This outline prepared by C. M. Foulk, Professor of Manual Training, Colorado State Teachers College.

The sixth grade work should begin by carefully reviewing the work done in the fifth grade. A more elaborate study should be made of different kinds of lumber and this coupled with a study of nails, brads, screws, etc.

In the study of nails the pupil should be taught how to know the different kinds of nails such as spikes, common nails, casing nails, finish nails and also how to determine a nail by the common term "penny."

The sixth grade pupil should begin to branch out in the use of such tools as bevels, mortice gauges, compasses, coping saws, etc. Short talks on shop discipline should begin in the sixth grade.

The sixth grade pupil should begin to sharpen a few simple tools such as plane irons, chisels, etc.

The regular shop work should be begun by a short course in the construction of a few simple joints and later followed up with projects which require the making mortice dado and lap joint. These projects might consist of such articles as book racks, book ends, foot stools, match safes, knife trays, tool boxes, flower boxes, etc.

1. Modern reform schools.

D. Prevention instead of cure.

E. Personal responsibility.

Seventh Grade

The seventh grade students should be given a thorough drill on how to find projects on which they can work. These can be gathered from a study of the room, the school, the farm and the students own needs.

The pupil should make a drawing of his project and be allowed to use some of his own ideas and these coupled to the ideas of the teacher. This method trains the student to think out a problem and at the same time he learns to work according to given instructions.

In the seventh grade considerable stress should be laid on the finishing of the articles constructed. The use of stains, shellacs, varnish, paint, etc., should be taken up and made an important part of the work of this grade.

Practical Characteristics of Protects.

The work of this grade should be carried on in such a way as to reduce class instruction to a minimum and consequently to afford considerable latitude to individual pupils in the choice of projects. In mose instances models should be selected from an approved list. The instructor being careful to see that each model is well adapted to the abilities and needs of the individual pupil in question. Community and group work should be encouraged and visits to industrial plants should be contemplated in the plan of work.

Eighth Grade

The work in the eighth grade should begin with a study of shop mathematics. This should consist of problems in computing the number of board feet in different kinds of lumber, computing the amount of lumber necessary to construct different articles. The use of fractions in the laying out of a piece of work and the keeping of an accurate account of the student's own work.

In this grade each student should be required to keep all his own edge tools in working condition. The application of the steel square should enter into many of the problems in the work of this grade.

Particular stress should be placed on accuracy in laying out and the execution of work.

Joining, tonguing and groving, and gluing should be an important part of the eighth grade work.

Suitable projects for this grade might be such articles as fern stands, tabourettes, magazine racks, clock shelves, doll furniture, picture frames, bird houses, poultry fixtures, dog houses, kites, etc.

Printing

The aims of the work in printing, though prevocational, is to teach the fundamental principles of the trade and through typographical construction—paragraphing, capitalization, punctuation, spelling, accuracy, and division of words—better English. In the printshop the pupil is trained in type setting, proofreading and handling of the press. In addition to "straight copy" he assists in job work, tabular composition, commercial forms, and some display work which requires a knowledge of values and relation of paper and inks; cutting stock, involving mathematics; and design for which he must understand definite art principles. In studying the principles of design in printing he learns to distinguish between good and bad printing.

Book Binding

Bookbinding of an elementary nature—binding small volumes in one-fourth leather, in full cloth and in buckram; making photograph books, note books and small leather articles. The underlying idea in this course is to give children ideas regarding the nature of a book and the technique involved in a completed piece of binding. They, also, gain an appreciation of bookbinding as an art and the relation of bookbinding to the other arts. Besides the binding of books the children are given an opportunity to work on objects of interest to them, to their families or friends, or upon objects that may have a particular, or general, value to them.

MUSIC

First Grade

Simple rote songs; individual voice and ear training; recognition of repeated phrases; application of singing names; development of rhythm; individual and group singing.

Second Grade

Singing of simple rote songs; individual voice and ear training; recognition of two and three part rhythm; recognition of note value simple pharse singing from phrase card and blackboard; singing from notation; books in hands of children. (Book I—Progressive Series); individual and group singing.

Third Grade

Rote songs suitable to grade; individual voice and ear training; reading of simple songs from staff in keys of C, F, G, Bb, D, E6, A, A6, E; individual singing. (Book I, Progressive Series).

Fourth Grade

Book II, Progressive Series; rote songs suitable to grade; naming of staff degrees; naming of keys; rapid and accurate sight reading; ear training; introduction of sharp and flat chromatics; individual singing.

Fifth Grade

Book II, Progressive Series; progressive continuation of previous work; continues study of sharp and flat chromatics; study of major scales; songs in minor; introduction of two part singing; individual singing.

Sixth Grade

Book III, Progressive Series; Study of song forms; one, two and three part singing; study of minor scales; simple modulation; chord formation.

Seventh and Eighth Grade

Chorus work, glee clubs, and music appreciation. The Seashore music tests are given to determine music ability.

The fundamental principles underlying penmanship are:

1. In judging the penmanship of pupils the method of writing penholding, movement, ease, speed—should be considered as well as legibility and form.

A moderate slant is better than vertical writing. Uniformity of slant is more important than conformity to a particular degree of slant. the fundamental movements, with the fingers acting as assistants, is
 A method of writing by which are arm movements are used for

3. A method of writing by which are arm movements are used for productive of better results than a method that makes use of the fingers alone.

4. Copying is not a good method of teaching penmanship. There should be systematic instruction in word and letter forms, in pen holding and movement, following by practice. The child should be taught to study and analyze the form he is producing.

5. To establish desirable habits in writing the instruction given in handwriting lessons must be applied not simply in those lessons but at all times in written work.

The grade given in penmanship should be based upon the quality of the work which is turned out in the other subjects as well as that which is produced in the writing lesson.

6. The teacher should herself practice a correct method of writing. If she does not exemplify the methods she is teaching, pupils have little reason to adopt them.

7. The individuality of pupils should be respected in teaching writing as in teaching all other subjects.

Practice Periods

To secure desirable results in writing an adequate amount of time must be devoted to it. The same amount of time divided into rather short periods is more effective than if it is all expended in long periods. With the child in the earlier grade ten minutes is probably the best length of period, and the upper grades from twenty to thirty minutes.

The Grades

The characteristics of the child make the acquirement of writing a difficult matter for him and one which is attended with considerable nervous strain. In the beginning the requirements for speed and accuracy should be made very low. At the beginning the writing should be done on the blackboard. This may very profitably be started in the second grade. When the child first used paper he should write with large letters, the pencil should be large and the lead smooth. Os the child grows older and gains in skill, the writing may be gradually decreased in size and may become gradually more precise. In grades four to six the child should begin formal drills. The development of skill should be accomplished in two or three years.

Tests

Children should be taught to trace their progress in both quality and speed. Each child should be compared with his own past record rather than with that of other pupils and this should be expressed in a form as definite and objective as possible. The best means to accomplish this is by the use of handwriting scales. Interest in writing may be kept alive by frequent use of tests for form, speed and fluency. The pupils should become familiar with the use of the scales and with the standards appropriate to their respective grades.

The following scales are of value:

Ayres, "Scale for Measuring the Handwriting of School Children." Freeman's series of charts in which the progressive degrees of excellence in each of the main elements of form are illustrated. Starch-Handwriting Scale. Lister's Handwriting Scale. The Gettysburg edition of the Ayres Scale. Thorndike-Handwriting Scale.

Eight Essential Steps in Teaching the Palmer Method* of Writing

The Three Stages into which these Eight Essentials Steps should be divided:

FIRST STAGE

- 1st Step—Posture: 1st, of body; 2d of feet; 3d of arms; 4th of head. 2nd Step—Muscular Relaxation: Showing pupils how to overcome the natural tendency to muscular rigidity. Opening and closing fingers, raising and lowering arms, and other calisthenic exercises to be used in the beginning stages, and later when necessary.
- 3rd Step—Penholding: Follow physical training lines. Because of the differences in size and construction of hands, length of fingers, etc., it is not well to try to make all pupils hold their fingers in exactly the same positions. This is thoroughly discussed in the textbook entitled: "The Palmer Method of Business Writing."
- 4th Step—Making the first easy exercise with special relation to the first three steps until position and easy movement are somewhat automatic; the speed element to be seriously considered.

In the first stage it is expected that teachers will give the closest possible attention to posture, the development of the right motive power and its application at the required speed in making the straight line and oval drills. It would be a waste of time to talk much about the application of the movement in muscular movement writing before pupils have mastered this first stage of the work and are able to make well the drills mentioned. The instructions on pages 2 to 23, inclusive, of the Manual should be studied very closely. It is suggested that teachers read and discuss these instructions with their pupils. It should be borne in mind that exactly two hundred downward strokes should be made to the minute in both straightline and oval drills and that 100 counts should carry the pen not more than one quarter of the distance across a page eight and one-half inches wide. While this practice of the straightline and oval is proceeding, teachers should closely watch the arms and hands of the pupils. Wrists should be kept from the paper. It is well to keep the wrists high enough to bring the forearm rest back to a point very near the elbow. It must be remembered that in muscular movement penmanship there are only two points of contact. They are: the muscle of the forearm just in front of the elbow, and the third and fourth fingers. These fingers should slide over the paper either on tips of the fingers or on the finger nails.

Pupils are prepared to learn how to write with the muscular movement when they can make, automatically and well, the straightline and oval exercises, in easy rhythm, with correct movement.

SECOND STAGE

- 5th Step—Specific application of the automatic movement to easy letters and words. Strive for the retention of good posture and correct speed.
- 6th Step—Movement correlation in all written work. This can be accomplished only when the grade teacher, who is constantly with her pupils, has studied, digested, and mastered the preceding steps. On expert penman and skilled teacher of muscular movement writing—giving occasional lessons in the class —could accomplish but little by intermittent visits in this stage of transition from movement drill to movement writing.

In the second stage of the work we include steps 5 and 6. In this

*This outline prepared by Professor A. O. Colvin, Department of Commercial Arts, Colorado Teachers College.

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stage we bridge the chasm between movement drill and movement writing, and teach pupils how to do all of their penmanship with muscular movement. The movement used in writing should be swift enough to produce sharp, clear-cut lines and at the same time slow enough to permit the pupils to form the letters well. In this connection special study should be made of the instructions at the bottom of page 23 in the last edition of the Palmer Method Manual. Then, the words "mine," and "sell" should be practiced at the speed indicated in the instructions. It is very important that pupils should understand the relative amount of force to be used in making the two space straight-line and oval drills, and that in writing these little words the minimum letters are only one-twelfth as high, or one-sixteenth of an inch. When pupils can write the words on page 23 well, they will then be ready to write other words. It will not matter particularly in what part of the Method the words practiced are found, but the more difficult words should be avoided until the pupils can write simple words well at the required speed and with correct movement. It will be well to use frequently the words found on page 23 for the purpose of ascertaining whether or not the pupils are writing too slowly or too swiftly. If in these words it is found that the small "s" is not made very well, then pupils should be re-quired to turn to page 45, on which the small "s" is given as a special drill. Then, perhaps, it will be discovered that the small "i" is made too long or too broad, or to tip over too much. If so, it will be well to turn to drill 33 and practice that exercise according to the instructions until it can be made correctly and at the right speed. Indeed, as words are selected and practiced from different parts of the Method, the letters found to be most difficult should be given special attention and the drills in which they are treated in the Method should always be those selected for practice. Drill 14 is one of the best exercises for use in developing the over-motion used in "m," "n", the last part of "h," the first part of "y", and in parts of other letters. In this exercise, pupils also train their hands to change from over-motion used in the letters to under-motion used in the connective line. When pupils do all of their writing with muscular movement, even though in a crude sort of way, they are then ready to pass from the second to the third stage.

THIRD STAGE

- 7th Step—The element of speed application and movement direction in letters, parts of letters, words, and connective lines. In this step which is one of the most important in the teaching of good writing because of its bearing upon good formation, and consequently upon good writing, pupils must be taught that a line is the product of the motion used; that the motion preceding the contact of the pen to the paper must be in the direction of the line to be made, and that some lines, being more complex than others, should be made with less speed.
- 8th Step—The teaching of observation and mental concentration as they have a bearing upon the relation of one letter to another, in size, slant, and spacings. This is an essential and final step in the teaching of writing which embodies legibility, rapidity, ease, and endurance. It is a lamentable fact that many teachers are satisfied when they have mastered and are able to teach the first six steps. Teachers who have not mastered steps seven and eight may secure good postures and easy muscular movement in all written work, but the writing is likely to be ragged and dissipated in appearance.

Teachers who try to change the teaching order of these eight steps will build mountains of trouble which worry and work will only enlarge.

Every teacher should be able to demonstrate before her pupils the letters which she is to teach and the words which are used as form builders. It is not expected that pupils will write well during the second stage of this work, but unless the first six essential steps are taught in exactly the right way, the pupils will not be prepared to learn how to write with accuracy and ease when they take up the seventh step. Teachers must not rely wholly upon the directions given in these Eight Essential Steps and the three stages into which they are divided. These are intended to be only a guide for the study of the instructions in the Method and the practice of the drills in that book.

Bibliography

Ayres, L. P.—"Scale for Measuing the Quality of Handwriting of Sch. Ch." Bulletin 113, Russel Sage Foundation. Freeman, F. N.—"The Teaching of Handwriting"—Houghton-

Mifflin Co.

Judd, C. H.—"Genetic Psychology for Teachers," Ch. VII, Pg. 219-35. Houghton-Mifflin Co.

Thorndike, E. L.—"Handwriting," Teachers Col. Record 1910. The Fourteenth Yearbook of the National Society for Study of Education, Part I., Chapter V.

READING

First Grade

The fundamental aim in reading is to stimulate thinking so the first experience a child should have in reading is thought-getting. The first reading is short stories, rhythmes or sentences giving complete thoughts and the children do not distinguish the individual words. Then sentences phrases and words are located that say certain things. The sequence is story, sentence, phrase, word, sound, and letter. The stories, poems, rhymes and conversations about interesting experiences of the children form a splendid basis for thoughtful first grade reading. The beginning of phonics is words that are alike or begin alike and then the phonograms and individual sounds.

Comprehensive or Intelligent Interpretation. Τ.

a. By relating material to child's experience.

- b. By effective habits of study.
- c. By wide reading to form many centers of interpretation.
- Suggestions for accomplishing above points.
- Use as interesting experiences as possible for first lessons so 1. children will attach vivid meaning to words learned.
- Children read story from cards. 2.
- 3.
- Teach children short poems or nursery rhymes. Later place on cards and read by wholes and sentences. 4.
- 5. Teacher tell story and pupils reproduce.
- 6. Pupils dramatize short stories.
- 7. Discuss name of story and pictures before reading.
- Relate each new story to some similar experience of the 8. children.
- Direct children's reading by asking questions. 9.
- Have children read by thought units instead of lines or pages. 10.
- One child reads aloud and others ask him questions on what 11. what he reads.
- 12. Illustrate story with cuttings or crayolas.

Thorough Mastery of the Mechanics. II.

- a. For effective oral reading.
- b. For effective silent reading habits.
- Children locate sentences, phrases and words that say certain 1. things.
- Use sentence, phrase and word drills and flashcards to get 2. quick recognition.
- Find words that begin or end alike. 3.
- Give phonograms and letter sounds when children know enough 4. sight words for comparison.
- Use period separate from the reading period for word and 5. phonic drills.
- Use short exposure sentence to get rate in silent reading. 6.
- Give pronunciation drills for voice control to get good artic-7. ulation.
- Build sentences and words from familiar stories with words 8. or letters.
- 9. Develop ear training.

Suggestions:

- Teach children how to care for their new books. 1.
- Show how pages are numbered. 2.
- 3. Show how to find page and title of story quickly.
- 4. Read aloud and discuss with children short stories.
- Have as many books of real content at hand for individual 5. reading as possible.
- 6. Read aloud and have class memorize several short poems.

The fundamental aim of reading is thought-getting. This grade is to continue the habits of study and mastery of mechanics begun in the first grade and develop fluency by wide reading. There needs to be three periods devoted to reading. In the morning period teacher and pupil work out new material. There should be much thoughtful silent reading in answer to stimulating questions. At first the questions are given orally by the teacher and later written on the board or class cards to get good habits of study. The drill period should be separate from the reading period where phonics and word analysis are given. The after-noon period should be much oral and silent reading of easier material to get rate, fluency and fix the habits developed in the morning. There should be both silent and oral reading and lively discussion of content of what is read. This reading should be as wide as possible and along different lines.

I. Give Comprehension or Intelligent Interpretation.

- a. By relating material to child's experience.
- b. By effective habits of study.

c. By wide reading to form many centers of interpretation. Suggestions for accomplishing above points.

- - Relate new material to some similar experience of the children. 1.
 - Teacher tell story in abridged fashion, pupils work out com-plete story from book. 2.
- 3. Pupils read to find answers to questions.
- 4. Pupils follow written or printed directions.
- Pupils tell meaning of words by suggesting others that might 5. have been used.
- 6. Read story to plan scenes and characters for dramatization.
- 7. Help pupils study a difficult story by asking questions while they work out story.
- Direct the reading by thought units not by pages. 8.
- 9 While one child reads aloud others study to ask him questions on what he reads.
- 10. Illustrate story with cuttings or crayolas.
- Use some simple reading units as Indian Life or Animals for 11. informational reading.
- Give Thorough Mastery of the Mechanics. a. For effective oral reading. II.

 - b. For effective silent reading habits.

Suggestions for accomplishing above reading habits.

- Continue use of sentence, phrases and word drills from flash 1. cards to increase rate of recognition.
- See that children can use sounds learned in first grade to gain 2. independence in word recognition.
- Complete analysis of monosyllablic words and recognize known 3. parts of longer words.
- Teacher tell short synopsis of new story putting difficult 4. words on board as she comes to them, pupils pronounce them.
- Find quotations quickly in answer to questions to get speed. 5.
- 6. Give drills for careful articulation.
- 7. Teacher read aloud and discuss with children several books of different types.
- Have some supplementary books to be taken home and read 8. and reported on.
- Read aloud and discuss with the children several short poems 9. then memorize.
- Teacher read part of some book aloud and then put with books 10. for individual reading.

11. The standard in rate for second grade is from 80 to 100 words per minute. The comprehension is not easily indicated except by a particular test, but informal tests can be given by questions or reproduction of suitable paragraphs or stories.

Third Grade

The fundamental aim of reading is to stimulate thinking and get experience from the printed page. The third grade is to continue the habits of study begun in the first and second grades, gain wider fluency and complete the mastery of the mechanics. At the end of the third year the children should be able to read independently third grade material and read fluently supplementary material at sight. The same three periods of the second grade need to be continued the afternoon period being on reading units for geography or other work.

- Give Comprehension or Intelligent Comprehension. Τ.
 - a. By relating material to child's experience.
 - b. By effective habits of study.

c. By wide reading to establish many centers of interpretation. Suggestions for Accomplishing above Points.

- 1. Keep material related to children's experience.
- 2. Pupils read to find answers to questions during study period.
- 3. Pupils find main parts of story and read in thot units, others asking questions.
- 4. Pupils read short individual stories to tell to rest of class.
- Pupils read silently to find answers to teacher's questions 5. and discuss accuracy of answers.
- Pupils read and find main and minor characters in story. 6.
- Plan scenes and dramatize stories. 7.
- 8. Have some reading units where children can read extensively for information.
- 9. Pupils write questions on different parts of the story, best used in class.
- 10. Find meaning of new words from content and suggest others that might have been used.
- Make list of new words or unusual expressions from lesson 11. to be used in sentences.
- Illustrate stories with drawings. 12.
- 13. Use of flash cards to test thought-getting and mechanics of reading.
- Give Thorough Mastery of the Mechanics. II.
 - a. For effective oral reading.
 - b. For effective silent reading habits.

Suggestions for accomplishing above points.

- 1. Use sentences and longer phrases for short exposure drill to increase span of recognition.
- 2. Use phonic drills if still needed.
- 3. Recognize known parts of polysyllabic words and work out pronunciation.
- Teach some of the more common prefixes and suffixes, an, in, 4. dis, and, less, ness, ful, fully, both for meaning and pronunciation.
- 5. Complete the mastery of the mechanics.
- Have articulation drills for clearness and flexibility of voice. 6.
- Read orally and silently much easy material to rhythmical 7. movements of eyes and gain fluency.
- III. Give Effective Use of Books.
 - a. Pages and chapters.
 - b. Tables of content. c. Glossary.
 - d. Reference books.

Suggestions for accomplishing above points.

1. Call attention to titles of books as indicating content.

- Insist that pupils use tables of contents to find topics. 2.
- Show how chapter headings indicate central thot of chapter. 3.
- 4. Teacher use, dictionary in front of children to get meaning, spelling of pronunciation of new words.
- Teacher read aloud and discuss with children several books of 5. different types.
- Pupils make short reports to class of books read from indi-6. vidual reading lists.
- Read aloud and interpret several short poems that children 7. memorize later.
- Have as many kinds of books from types above as possible for 8.
- individual reading. Show class how different books will give information on cer-9. tain topics as life in Holland or How Ants Live.
- 10. Let children hunt up extra reading material on any topic they are studying.
- 11. The standard in rate for third grade is 100 to 125 words per minute. The comprehension standard cannot be indicated very well except in a particular test, but the teacher can give informal tests by having all the class read a certain paragraph or story by time and then reproduce or answer questions on amount read.

Fourth Grade

The mechanics of reading should be fairly well mastered by the time children enter the fourth grade. There will need to be less word and phonic drill for word recognition and more word and phrase study for meaning. There should be wide reading with emphasis on silent reading, using thot provoking assignments that will develop independent habits of study. Much reading will be informational reading connected with geography, history or other subjects of the grade.

I. Give Comprehension or Intelligent Interpretation.

- a. By relating material to child's experience.
- b. By effective habits of study.

c. By wide reading to form many centers of interpretation.

Suggestions for accomplishing above points.

- Connect new material with similar experience of pupils. 1.
- 2. Find answers to thot provoking questions.
- 3. Find the central that in paragraphs and short selections.
- Read quickly to reproduce ideas of a paragraph. 4.
- 5. Find authors aim or purpose in a selection.
- 6. Determine relative importance of statements.
- 7. Draw conclusions and give reasons for them.
- Pupils write questions on main parts of story-class discuss 8. and criticise them.
- 9. Judge meaning of words from how used, then verify with dictionary.
- Read story to dramatize it, others critical of the interpreta-10. tion.
- Read individual stories for reproduction. 11.
- 12. Have some reading units relating to geography, history, hygiene or nature study as all the stories the class can find about Lincoln.
- Use of flash cards to test thought-getting and mechanics of 13. reading.
- II. Give Thorough Mastery of the Mechanics.
 - a. For effective oral interpretation.
 - b. For effective silent reading habits.

Suggestions for accomplishing above points.

- Increase amount of easy silent reading to get rhythmical 1. sweeps of eyes and few fixations.
- 2. Begin systematic study of the dictionary. (See spelling outline).
- 3. Give word analysis for meaning as well as pronunciation prefixes and suffixes in, de, pro, est, ly, ness, less, ing, ed, and ous.
- 4. Study some common roots, make words lists from root as light, lights, lighting, lightning, delight, sunlight.
- 5. Give time drill in reading for thot.
- 6. Use informal test to locate pupils especially weak in rate or comprehension.
- 7. Locate their difficulty and arrange a special help period for them.
- 8. Have some motiviated oral reading morning exercises, when only one book is available, parent-teachers, etc.
- 9. Indicate class standards and encourage pupils to work toward them.

III. Give Effective Use of Books.

Pages and chapters.

Table of contents.

Glossarv.

Reference books.

Suggestions to accomplish above points.

- 1. Show and discuss how to use each new book in content subjects —tables of content, maps, charts, graphs and glossary.
- 2. Begin use of dictionary.
- 3. Show class how to find information on some topics, from other books.
- 4. Take class to library to show uses.

IV. Give knowledge reading materials and permanent interest in reading.

Literature.	Travel.
History.	Industry.
Science. Biography.	Geography.

Suggestions for accomplishing above points.

- 1. Encourage pupils to bring in clippings on any topic being studied.
- 2. Have reports on outside reading, telling characters and main points of story.
- 3. Have as many of above types of books for individual as possible.
- 4. Teacher read aloud and discuss several standard books.
- 5. Read aloud and discuss several longer poems and interpret and memorize some short ones.

The rate for fourth grade is about 145 words per minute. The comprehension score depends upon the test, but informal tests can be given in reproduction or questions to locate weak pupils.

Fifth Grade

The children of this grade should continue wide reading in all content subjects with the emphasis on silent reading habits. The reading should broaden their world, awaken their sympathies and give them a many sided interest in conditions and peoples. Their interpretation of characters should grow more accurate and the conclusions drawn for reading more reliable.

I. Give Comprehension or Intelligent interpretation.

- a. By relating material to child's experience.
 - b. By effective habits of study.
- c. By wide reading to form many centers of interpretation.

Suggestions for accomplishing above points.

- 1. Relate new material to previous experience.
- 2. Find central thot or selections and show relations to title.
- 3. Describe characters in selections, showing why certain conclusions were drawn.
- 4. Find answers to thot provoking questions.

- Pupils make that provoking questions to use in class dis-5. cussion.
- 6. Discuss relative importance of statements.
- Determine meaning of words from context and use dictionary 7. to find further information.
- 8 Make an outline of a story for reproduction.
- 9. Find authors aim or purpose in a selection.
- Dramatize some selections or parts of selections for oral inter-10. pretation.
- Have some reading units in connection with other subjects 11. as lumbering or how our arid lands are made productive.
- 12. Use of flash cards to test thought-getting and mechanics of reading.
- II. Give Thorough Mastery of the Mechanics.
 - a. For oral interpretation.
 - b. For effective silent reading habits.

Suggestions for accomplishing above points.

- Increase amount of silent reading in content subjects.
 Continue study of dictionary until pupils can use readily. (See spelling).
- 3. Carry on systematic word analysis, using new prefixes and roots as encountered.
- 4. Continue use of speed drills.
- Locate pupils especially weak in rate or comprehension and 5. provide for a special help period for them.
- 6. Have some motiviated oral reading.
- Post class standards and encourage pupils to work toward 7. them.

III. Give Effective Use of Books.

Pages and chapters.

Tables of content.

Glossary.

Reference books.

Encyclopedia.

How to use a library-Card index.

Suggestions for accomplishing above points.

- 1. See that pupils use tables of content to locate material in reference books.
 - 2. Discuss aids in new books used in this grade, maps, charts, tables, graphs and glossary.
- Use reference books to supply material for their reading units. 3.

Give knowledge of reading materials and permanent interests in IV. reading.

Literature.	Travel.
History. Biography.	Industry.
Science.	Geography.

Suggestions for accomplishing above points.

1. Bring in clipping for history or geography books.

- 2. Post lists of books under the different types to be drawn from library.
- 3. Keep record of books read and give credit.
- Bring in and discuss some good magazines as Nature Study 4 Review or Youths Companion.
- Interest pupils in some author and have them read as many 5. selections from his works as possible.

The standard rate for the fifth grade is about 170 words per minute. The comprehension standard varies with the test, but informal tests can be given in reproduction or questions that will locate the pupils low in comprehension.

A characteristic impulse at this age is an increased interest in reading if the mechanics have been mastered so that reading is fluent and easy. The children should read widely in their other subjects and have access to travel, biography and all types of reading. They should become somewhat acquainted with all fields and definitely interested in some. As in the fifth grade silent reading habits should be emphasized. There should be lively discussions for meaning and a keener interpretation of authors purpose and characters.

- Give Comprehension or Intelligent Interpretation.
 - a. By relating material to child's experience.
 - b. By effective habits of study.

L.

c. By wide reading to form many ceters of interpretation.

Suggestions for accomplishing above matter.

- 1. Relate material to previous experience.
- 2. Find authors purpose in various kinds of reading material.
- 3. Train pupils to work out sets of thot provoking questions best used for class discussion or written tests.
- 4. Draw conclusions and support them with facts.
- 5. Make a topical outline of material read for class report (discussion.
- 6. Find answers to judgment questions.
- 7. Describe and compare characters.
- 8. Continue synonym work.
- 9. Train pupils to go to source material and authorities to judge validity of statements.
- 10. Dramatize some selections or parts of selections to aid in getting good oral interpretation.
- 11. Use some large reading units where children read from all available sources to get information on a particular problem as, life history and extermination of the fly, or Occupation of the Swiss people.
- II. Give Mastery of the Mechanics.
 - a. For effective oral reading.
 - b. For effective silent reading habits.

Suggestions for accomplishing above points.

- 1. Continue systematic word analysis, building words with prefixes, suffixes and common roots.
- 2. Insist on independent use of the dictionary in all subjects.
- 3. Use speed drills on easy sight material.
- 4. Train pupils to recognize different silent reading purposes, as scanning material quickly to find valuable points, as in newspaper reading and reading carefully and intensively when important point is found.
- 5. Have oral reading for special occasions or when situation demands it.
- 6. Post grade standards and encourage pupils to work toward them.
- III. Give effective use of books.
 - a. Pages and chapters.
 - b. Tables of content.
 - c. Glossary.
 - d. Reference books.
 - e. Encyclopedia.
 - f. How to use a library-card index.

Suggestions for accomplishing above points.

- 1. Continue emphasis on use of reference material for other subjects.
- 2. Give instruction in use of encyclopedia.
- 3. Show and discuss value of other types of magazines as National Geographic.

- Post in room list of interesting books in many lines for library 4. reading.
- IV. Give knowledge of reading materials and permanent interest in reading:

Literature.	
Biography.	
Travel.	

Science. History. Geography.

Suggestions for accomplishing above points.

- 1. Make wider use of clippings and current events.
- 2. Read aloud and discuss several long poems.
- 3. Read widely from certain authors, keeping record of selections read.
- 4. Keep record and have reports of books read from library list, give credit in reading for each book read and reported on.

The standard rate for sixth grade is about 190 words per minute. The standard in comprehension depends upon the particular test used, but the teacher can test informally by questions or reproduction to locate pupils low in comprehension.

Suggestions for Stimulating Silent Reading

- Dramatization. Reading Motive. 1.
- 2. Varied, easy, and interesting supplementary reading accessible of worth while material.

3. Judging relative values. Speed, comprehension, organization and memory.

- 1. Read for central thought or main points.
- 2. Make outlines for chapters.
- 3. Make paragraph headings.
- 4. Read to see if chapters are well named and to make better headings.
- 5. Making up questions to cover main points.
- 6. Read to find favorite verse.
- 7. Selecting most beautiful scenes, best character sketches, well turned words or phrases.
- 8. Drawing the picture described.
- 4. Reading so as to read to others.
- Reading so as to report to others-either individually or by groups, 5. oral or written.
- 6. Rapid reading to answer a specific question.
- 7. Games for matching phrases and sentences.
- 8. Read silently directions for game, errand, problem; then do it.
- 9. Studying a story, description, of character sketch, so as to write well one self.
- "Flashing" words, phrases, or sentences. A device. 10.
- 11. Time limit for silent reading. Read a minute then count words. 12. Teacher reads a random sentence and child who first finds place continues.
- 13. Read part of the story. Allow class to finish exciting part silently.
- Competitive reading clubs—secret book reading. Keeping a written list of books read. 14.
- 15.
- 16.
- 17.
- Reeping a written hist of books teta. Reports to class of current events. Keeping individual speed records. Only within the limits of accurate comprehension are speed exer-18. cises safe.
- The rate at which one should read is determined both by the material 19. read and the purpose in mind.
- 20. We ought not to speak of speed in silent reading but rather of speeds in silent reading.

PHONICS

Phonic methods are simply devices for making the child self-reliant and independent.

Besides this purpose phonics aims to aid children in the pronuncia-

tion, enunciation, articulation and mastery of words. This use of phonics, phonograms, syllabification and spelling are not ends in themselves but merely means to an end.

A separate period for phonics aside from the reading period should be given a place in the daily program during the first three years of school.

First Grade

Material.

Consonants.

Short sounds of vowels.

Final e.

Double vowels.

Two vowels together.

Blends th, wh, sl, di, ti, sp, tw, fl, I (initial), sh, nk, ng, ck, ch, tch, ing, ir, ur (final).

Beginning of syllabication.

The formal work in phonics preceded by ear and lip drill.

Phonics are then introduced incidentally as the need is felt for them. The order and material varies somewhat according to books used for reading.

Second Grade

The educational values derived from phonics in the second grade are-

1.

Ear training. 2. Clear articulation.

3. Foundation for use of dictionary.

Pronunciation of new words. 4.

The work develops as follows:

I. Review first grade phonics.

II. Teach a, e, i, u, before r greatly modified.

Two sounds of c, s, g, and the correct sound of wh.

All the sounds of double vowels.

ai and ay like long sound of a.

oa and oe like long sound of o.

ie and y like long sound of i.

ew and ue like long sound of u.

au and aw like a in all.

g and dg like j.

a like short o.

ph and gh like f.

tion and sion alike.

Short yowel followed by two consonants, long vowel followed by one consonant.

Illustrate the silent k, g, w, b, l, t, gh.

Give some work with prefix and suffix and begin the diacritical marking.

Third Grade

Silent letters: w, f, k, l. a as in ask. ss, sp, st. ff, ft. ph, tion, th, nt, nd. e-a. a-e. 8-0

Arnold, Sarah., "Learning to Read", Silver Burdett Company. Bolenius, Emma., "Teachers Manual of Reading", Houghton Mifflin Co. Bonser, F. G., "The Elementary School Curriculum, Chapter XIII, Macmillan Company.

Briggs & Coffman, "Reading in Public Schools", Rowe Peterson Company. Charters, W. W., "Teaching the Common Branches", Chapter IV, Hough-

ton, Mifflin Co.

Freeman, F. N., "Psychology of the Common Branches", Chapter IV, Houghton, Mifflin Co.

Halliburton and Smith. "Teaching Poetry in the Grades". Houghton, Mifflin Co.

Huey, E. B., "The Psychology and Pedogogy of Reading", Macmillan Co. Jenkins, Frances, "Reading in the Primary Grades", Houghton Mifflin Co. Klapper, Paul, "Teaching Children to Read", D. Appleton Co.

Sherman, E. B., "Essentials of Teaching Reading", Univ. Pub. Co., Lin-coln, Nebr.

Wilson, H. B., and G. M., "Motivation of School Work", Chapter V, Houghton, Mifflin Co.

Eighteenth Yearbook of the Society for the Study of Reading, Part II. Pub. Sch. Publ. Co., Bloomington, Ill.

Fifteenth Yearbook-Part I.

Fourteenth Yearbook-Part I.

Sixteenth Yearbook-Part I.

Fourth Grade

Use of phonics and diacritical markings as a self help. Children will use all of them in working out new words and pronouncing words for themselves. No special time on the program is given for a phonics class but they are used whenever an occasion demands its use.

Reading Tests

The following reading tests are purchasable and have been used with good effect to test the work of a school:

Brown's Silent Reading Tests. Speed and content of silent reading.

H. A. Brown, State Normal School,

Oshkosh, Wisconsin.

Courtis's Reading Tests. Speed and content of silent reading. Courtis Standard Research Tests,

82 Eliot St., Detroit, Mich.

Fordyce's A Scale for Measuring Achievements in Reading. Speed and content of silent reading.

University Publishing Company,

Chicago, Illinois. Gray's Reading Tests. Oral Reading, Silent Reading.

William S. Gray, School of Education. University of Chicago, Illinois.

The Kansas Silent Reading Test.

Bureau of Educational Measurements and Standards, Kansas State Normal School,

Emporia, Kansas.

Monroe's Standardized Silent Reading Test. Modified form of Kansas Test.

Walter S. Monroe, Indiana Univ.

Bloomington, Indiana.

Starch's Silent Reading Test. A test for each grade.

University Supply Association,

Starch's English Vocabulary Test. Range of vocabulary.

Thorndike's Improved Scales for Word Knowledge and Visual Vocabulary. Scale A2 and Scale B. Test of ability to recognize meanings of words.

Bureau of Publications.

Teachers College, Columbia Univ.

New York City.

Thorndike's Improved Scale for Measuring the Understanding of Sentences, Scale Alpha 2. Test of grasp of content.

Bureau of Publications,

Teachers College, Columbia Univ.

New York City.

Thorndike-McCall, Reading Scale. A scale for testing and teaching silent reading. Ten forms have been prepared in order that a teacher may test her pupils once each month during the school year. Bureau of Publications, Teachers College, Columbia Univ.

New York City.

The study of spelling has value for the child just to the extent that the words learned are the words he uses or that he will use in the near future in doing the writing involved in carrying on the everyday affairs of life.

In making word lists distinctions between hearing, speaking, reading and writing vocabulary must be kept in mind. It is unwise to have a pupil spend the greater part of his spelling time upon words that appear only in his hearing, reading or speaking vocabulary. The words that a child needs to know how to spell are in the main the words that he uses in writing. While the words of the writing vocabulary are common to the hearing, speaking and writing vocabularies the writing vocabulary does not by any means represent a random selection of words from the other groups but rather it consists of a relatively small minimum of the words most useful to the child in expressing his own thoughts.

The minimum list of common words given in this outline are the result of a comparative study made by Tidyman of the six important investigations of the words commonly used by children and adults in their composition. The combined investigation comprises the Jones List of 4532 words. The Chancellor List of 1000 words, the Smith List of 1125 words, the Cook and Oshea List of 3200 words, the Stiedly and Ware List of 3470 words and the Ayres List of 1000 words. Tidyman's minimum word list consists of 1254 words common to four or more of the six investigations.

By calling attention to the recurrence of these words in written compositions and expressions, by making lists of the words pupils frequently misspell in written work and by requiring the use of words in sentences, the teacher will be able to keep the purpose and significance of spelling clearly before the children as well as provide for the use of words in their natural setting. The Horne-Ashbaugh Speller is recommended as a method of supplying special lists of words for each grade.

DEFINITIONS

The definition is a device for testing or clarifying the pupil's knowledge of a word. It is frequently difficult for pupils to give and is not so vital as the use of a word in a sentence. Nevertheless it may be used to add variety and interest in the work. The logical definition of words involves a high degree of abstract thinking and should not be expected of children in the lower grades. It has been found that the rational method of defining words of children in the Fourth grade is by colloquial definitions. In the Fifth grade the use of synonyms becomes prominent and in the Sixth grade logical definitions are in the majority although delnitions of other kinds are still common.

TRAINING IN THE USE OF THE DICTIONARY

The knowledge of using the dictionary is essential to the development of independent power in acquiring pronunciation, meaning, use and spelling of words. Suzzallo in his "Teaching of Spelling" says: "First, the alphabet is reviewed to see if it is well within the child's easy habitual command. Then the child is sent to the dictionary to find simple words the spelling of which he knows. At first these words have different initials, to establish the simple principles of alphabetic order. Later, words beginning with the same initials are assigned, to show that the initial letter alone does not determine the place of a word in an alphabetical list. Thus the principles of alphabetical and subalphabetical arrangements are mastered. And last, words, the spellings of which are doubtful to the child, are given; and the child is taught to scan the pages till he finds them. Special exercises are given to show a child how the pronunciation (lesser, lessor; least, lest) or meaning will assist him to find the word when the spelling is in doubt(capitol, capital; limpit, limpid). Special exercises are given to show the child how to determine which is the preferred spelling when there are two. "Exercises in finding pronunciation are given in the same careful way until each technique is taught,—preferred pronunciation, the interpretation of diacritical marks through the key words at the bottom of the page, the meaning of the accents, etc. Then the child is drilled until he can readily determine the meaning of a word. The abbreviations for the parts of speech are explained. He is encouraged to read all the meanings, avoiding those marked 'rare', 'colloquial', or 'obsolete', and to select the most likely meaning with the aid of the examples of usage."

TEACHERS COLLEGE

METHOD OF PRESENTATION

The attention of the child is called to the whole word on the board or in the book. The word is pronounced by the teacher and if quite unusual or familiar, by the children.

- 1. The word is used in a sentence or defined.
- 2. The teacher writes the word on the board in syllables.
- 3. The children pronounce the word separately and distinctly by syllables with a clear visualization of the letters of each syllable.
- 4. The attention of the children is fixed upon the familiar, unfamiliar, common and difficult parts of the words by picking out and associating them with familiar parts of other words.
- 5. The children are told to look away from the board and try to see it as it looked on the board.
- 6. The word is spelled orally by individuals or by the class.
- 7. Oral spelling is preceeded by a clear and accruate pronunciation of the word.
- 8. The word is written several times.

Slavish obedience to this program is not necessary as Tidyman says it is offered as giving the essentials of a spelling method, the order in which the several exercises should occur and the relative emphasis that each exercise should receive. It is highly desirable that each teacher work out her own plan of teaching spelling which should be determined largely by the needs of her own particular group. The essential thing to be accomplished in any preparation of spelling words are:

- 1. Recall or development of the heard, spoken, and written symbols
- of the word together with its meaning and use.
- 2. The clear accruate pronunciation and visualization of the word by syllables.
- 3. An accruate auditory-speech-motor image of the word; and a definite hand-motor image.

Dr. Ernest Horn gives the following method of learning to spell a word.

- 1. The first thing to do in learning to spell a word is to pronounce it correctly. Pronounce the word saying each syllable very distinctly and looking closely at each syllable as you say it.
- 2. With closed eyes try to see the word in your book, syllable by syllable, as you pronounce it in a whisper. In pronouncing the words be sure to say each syllable distinctly. After saying the word, keep trying to recall how the word looked in your book, and at the same time say the letters. Spell by syllables.
- 3. Open your eyes, and look at the word to see whether or not you had it right.
- 4. Look at the word again, saying the syllables very distinctly. If you did not have the word right on your first trial, say the letters this time, as you look sharply at the syllables.
- 5. Try again with closed eyes to see the word as you spell the syllables in a whisper.
- 6. Look again at your book to see if you had the word right. Keep trying until you can speel each syllable correctly with closed eyes.
- 7. When you feel sure that you have learned the word, write it without looking at your book, and then compare your attempt with the book to see whether or not you wrote it correctly.
- 8. Now write the word three times, covering each trial with your hand before you write it the next time so that you can not copy.

If all of these three trials are right, you may say that you have learned the word for the present. If you make a single mistake, begin with the first direction and go through each step again.

9. Study each word by this method. Take special pains to attend closely to each step in the method. Hard and careful work is what counts.

DEVELOPMENT OF A SPELLING CONSCIOUSNESS

The development of a spelling consciousness is accomplished primarily through getting a strong positive impression of a correct form of a word in presentation and in fresuent repetition and use of this form until it is positively known and all danger of vagueness and uncertainty is passed. Another principle, of a general preventive nature, is never take a chance in spelling a word about which you have any doubt. There is nothing that more guickly and surely undermines the security of the spelling consciousness. A mistake made through carelessness will be repeated with increasing readiness until all feeling of certainty as to the correct form of spelling is lost. When in doubt about the spelling of a word children should be taught to use the dictionary or in the lower grades to consult the teacher. Experiments show that this habit would have prevented nearly two-thirds of the spelling errors. If children gain a strong, vivid impression of the correct spelling of words and form the habit of looking up every word when it is first doubted errors will be reduced to the minimum.

TREATMENT OF ERRORS

In spite of the best efforts that can be put forth it is found impossible to prevent all errors. Tidyman says they can be reduced in number by perfecting methods of presentation and review and by developing systematic habits of word study. There are some pupils who seem to reach practically perfection in spelling but there are others who persist in making mistakes.

Dealing with misspelling is a problem that every teacher has to face. A helpful classification of errors, prepared by Dr. Leta S. Hollingworth:

- 1. Errors which result from automatically copying the ending of a word that is just above the word being spelled; e. g, "closet, clockt."
- 2. Errors which result from automatically including a syllable which is therefore coming "to mind" as that word is being finished; e. g., "postcard card".
- Errors which result from a tendency to omit, in written spelling, one of two letters which require a similar motor response for their execution; e. g., "sd" for "sad", and "gld" for "glad".
 Errors which result from writing a letter that has common
- 4. Errors which result from writing a letter that has common kinaesthetic elements instead of the correct letter; e. g., "dod" for "dog", and "forn" for "form".
- 5. Errors which result from substituting a letter that has common visual elements instead of the required letter; e. g., "goiny" for "going", and "store-heeper" for "store-keeper".
- "going", and "store-heeper" for "store-keeper".
 Errors (very common) which result from substituting a letter that has common phonetic elements for the required letter; e. g., "celect" for "select".
- 7. Errors which result fro mtransposing two adjacent letters as is so often done in typewriting; e. g., "Indain" for "Indian", and "mintue" for 'minute".
- 8. Errors which result from perseveration of an element, especially a dominant element, in a word just used; e. g., "the theeth" for "the teeth".
- 9. Errors which result from a tendency to omit the last letter of the word being written, when the initial letter of the next word has the same or a similar sound; e. g., "advise to" for "advised to".
- 10. Errors due to doubling the wrong letter in a word which contains a doubled letter; e. g., "frezze", for "freeze".

It is the problem of the teacher in spelling to locate difficult words, to determine their particular difficulty, to find when words have been learned and where further instruction or drill is needed, to locate individuals who need special help and to determine the particular help needed; to accomplish these things it is necessary to use three types of tests. The preliminary test, the main test and the review test.

The preliminary test is a test given before instruction is begun to find out what words children already know, what words are difficult, how time should be disposed among the words of the lesson and what the particular spelling difficulties of the words are. For the saving of time the preliminary test should consist of the dictation of isolated words. Tidyman found it well to include in the preliminary test the new words for a week and to give the test on the Friday preceeding the week in which the words were taught. In recording errors as much work as possible should be placed upon the children. Above the third grade experiments show that the teacher can spell the words back to the children and rely upon their judgment and honesty for marking. The tabulated results of the preliminary tests will consist of the number of times each word was misspelled. By comparing these with the number of pupils present it will be possible to determine the relatively difficulty of each word is also very important. To find this the teacher should look over the papers for the most frequent form of misspelling or the part of the word causing the greatest difficulty. In these tests as in all other tests children should be taught to discover for themselves the hardest words as well as the parts of words causing the greatest difficulty. For this purpose individual word lists should be prepared, containing words missed. The purpose of the main test is to find out where further drill is

The purpose of the main test is to find out where further drill is needed and to discover what pupils need special help. This test follows the instruction and drill periods. It is customary to use a column test for this purpose. The sentence test has some advantages over the column test and also some disadvantages.

The review test should occur occasionally as the need for review demands and should be of the sentence sort. The review tests occur after long intervals to show retention and to give children additional drill in the use of words.

A SUGGESTIVE PLAN FOR DETERMINING WORD DIFFICULTY

Any plan for determining word difficulty must be accruate and practicable. It must be workable and based upon actual spelling of children. The following plan is taken from Tidyman's "The Teaching of Spelling":

Week of Feb. 14		Monday Feb. 14	Tues- day	Wednes- day	Thurs- day	Fri- day	Review test March	
No. present courage careful which their there business service servant faithful many friend since explanation attention always write writing once declaration description vacation doctor often automobile	$\begin{array}{c} 44\\ 12\\ 3\\ 1\\ 3\\ 2\\ 10\\ 18\\ 16\\ 19\\ 2\\ 7\\ 6\\ 21\\ 16\\ 3\\ 4\\ 8\\ 1\\ 36\\ 20\\ 200\\ 7\\ 14\\ 22 \end{array}$	$ \begin{array}{c} 40 \\ 1 \\ 0 \\ 1 \\ 1 \\ 2 \end{array} $	$ \begin{array}{c} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	40 4 3 0 1 2 0	40 3 2 1 0 0 5	$\begin{array}{c} 40 \\ 0 \\ 0 \\ 0 \\ 1 \\ 2 \\ 1 \\ 1 \\ 1 \\ 2 \\ 2 \\ 3 \\ 0 \\ 0 \\ 1 \\ 2 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	$egin{array}{c} 3 \\ 43 \\ 1 \\ 2 \\ 0 \\ 3 \\ 2 \\ 1 \\ 3 \\ 1 \\ 1 \\ 0 \\ 0 \\ 2 \\ 4 \\ 2 \\ 2 \\ 0 \\ 0 \\ 4 \\ 10 \\ 3 \\ 2 \\ 3 \\ 2 \end{array}$	

SPELLING PLAN AND RECORD SHEET

This plan provides the preliminary test for the words for the week on the Friday preceeding the week in which the words are to be taught. The words are dictated to the children then spelled back to them for correction. Finally the teacher determines the number of errors for each word on her record sheet. In this way the work for the week is planned and laid out. By comparison with the "number present" the figures give some notion of the degree of difficulty of the several words and show the teacher the relative emphasis that should be laid on each word. After each days lesson a simple test is given and the figures entered in the appropriate column. If the teaching is thorough there should be few errors or none in the daily test. When a word is found to have too many errors it is carried over into the next days lesson and treated as before. This plan provides also for a review lesson of all the words of the week on Friday with the record of errors and finally a test without study after two weeks.

The use of this plan shows the teacher how to distribute her time and effort among the words of the lesson and gives her effective and repeated checks upon the efficiency of her work. More words may be given at a time in the preliminary test than is here suggested and the interval may be lengthened between the preliminary test and the presentation of words.

STANDARD TESTS AND SCALES

The important standard tests are the Buckingham Test, 50 words; the Buckingham revision of the Ayres Scales; the Ayres Scale; Ayres Ten Word Test and the Starch List.

The practical value of these scales are:

- 1. They provide common tests of words of a known degree of difficulty.
- 2. They make possible a more accurate comparison of the different groups of children.
- 3. They provide standard scores from the point of view of the classroom teacher.

The limitations of the scales are that:

- 1. The measurements lack precision because they do not measure the special results of spelling instruction.
- 2. They do not measure growth in the spelling efficiency.

A Minimum Word List

This list of words from Tidyman, W. F., "Teaching of Spelling." World Book Company.

	1 0			
able	bad	XOC	check	crowd
about	oaggage	boy	cheese	cruel
absence	ball	branch	chief	cry
absent	banana	bread	child	cup
accept	band	break	children	cupboard
accident	bank	breakfast	chimney	custom
account	barn	breast	choose	cut
across	basket	brick	chop	daily
act	bathe	bridge	Christmas	damage
add	be	bright	church	damp
addition	bean	bring	circle	dance
address	bear	brother	city	danger
affair	beat	brown	class	dark
afraid	beautiful	bruise	clean	date
after	because	bug	clear	daughter
again	become	buggy	clerk	day
against	bed	build	climb	dead
age	been	bump	close	deal
ago	before	bunch	cloth	dear
agree	beg	bundle	cloudy	death
agreeable	begin	burn	club	debt
ahead	beginning	bury	coal	decide
air	behind	business	coast	decision
			coat	decorate
alike	believe	busy	coffee	deep
all	bell	but	cold	deer
allow	belong	butter	collect	defeat
almost	below	button	color	delay
answer	berry	buy		dentist
any	besides	cabin	comb	depot
anything	best	cake	come	deserve
anyway	better	call	comfort	desire
appear	between	came	coming	desk
apple	bicycle	camp	committee	
appoint	big	can	common	destroy
argument	bill	candy	company	diamond die
arm	bird	capital	complete	
around	birth	car	condition	difference
arrange	bite	card	contain	
arrangement	black	care	continue	dinner
arrest	blanket	carpet	convenient	direct
arrive	bleed	carry	cook	dirt
ask	blind	case	copy	disappear
asleep	block	cat	corn	dish
assist	bloom	catch	corner	distance
association	blossom	cattle	cost	divide
assure	blot	cause	cottage	do
attack	blow	cave	cotton	doctor
attempt	blue	ceiling	could	dog
attend	bluff	cellar	count	dollar
attention	board	cent	country	done
aunt	boat	center	couple	door
automobile	body	certain	courage	doubt
avenue	boil	chain	course	down
awake	book	chair	court	dozen
away	born	chance	cousin	draw
awful	both	change	crack	dream
awhile	bother	character	crawl	dress
baby	pottom	charge	cross	drink
back	bought	chase	crow	drive

				Sec. Com
drop	feet	gave	hide	lake
drawn	fell	general	high	land
due	fellow	get	hill	large
during	felt	girl	himself	last
dust	fence	give	history	late
duty	fever	glad	hold	laugh
each	few	glass	home	law
ear	field	go	honest	lawn
early	fierce	gold		
earn	fifth	0	honor	lawyer
	fifty	gone	hope	lay
earth		good	horn	lazy
east	fight	good-by	horse	lead
easy	figure	goose	hospital	leaf
eat	fill	government	hour	lean
edge	finally	grab	house	learn
education	find	grade	how	least
effect	fine	grain	however	leave
effort	finger	grand	hundred	left
egg	finish	grapes	hungry	leg
eight	fire	grass	hunt	
either	first			lemon
election	fish	grave	hurry	length
else		gray	hurt	lesson
	five	grease	husband	let
end.	point	great	ice	letter
engine	fix	green	idle	level
enjoy	floor	grocery	if	lie
entertain	flour	ground	ill	life
enough	flower	grow	imagine	light
escape	folks	guard	importance	like
especially	follow	guess	impossible	line
even	food	guest	in	list
evening	foot	guide	inch	listen
ever	football	hair	indeed	
every	force	half	industry	little
everything	forenoon	hall		live
examination	forest		information	lonesome
		hammer	inside	long
examine	forget	hand	intend	look
except	fork	handkerchief	interest	loose
expect	form	handle	into	lose
expense	fort	hang	invitation	lot
experience	fortune	happen	invite	loud
explain	forty	happy	iron	love
express	forward	hard	jail	low
eye	found	harness	jewel	lumber
face	foundation	hat	journey	lunch
fact	four	hate	judge	lungs
factory	free	haul	judgment	machine
fail	freeze	have	juice	madam
failure	freight	hay	just	made
fair	fresh	he	keep	
fall	friend	head	kill	mail
familiar	frighten		kind	make
family		healthy		man
	from	hear	kindness	manage
famous	front	heard	king	manners
far	fruit	heart	kiss	many
farm	full	heaven	kitchen	march
farther	furnace	heavy	kitten	mark
fast	furniture	heel	knee	market
father	further	height	knew	marriage
favor	future	hello	knife	marry
fear	game	help	knock	master
feather	garden	her	know	match
feed	gas	here	knowledge	matter
eel .	gather	herself	lady	maybe
1.	ALL REAL PLATER IN		-0	

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		norhong	question	sail
me	north	perhaps	quick	salary
meal	nose	period		
mean	not	person	quiet	same satisfy
measure	note	personal	quite	
meat	nothing	piano	race	saw
medicine	notice	pick	railroad	say
member	now	pienic	rain	school
men	number	picture	raise	scratch
mend	nurse	pie	raisins	sea
mention	nut	piece	rake	search
merry	object	pin	ranch	second
middle	occasion	pink	rate	secret
might	occupy	pity	rather	secretary
mile	ocean	place	reach	section
milk	o'clock	olain	read	secure
mill	of	plan	ready	see
mind	offer	plant	real	seed
mine	office	play	really	seem
minute	often	pleasant	reason	select
		please	recommend	sell
miss	oil		receipt	send
mistake	old	pleasure	receive	sense
mix	omit	plenty		sent
money	on	pocket	recent	
month	once	poison	red	separate
moon	one	police	refer	serve
more	onion	poor	relative	service
morning	only	popular	relief	set
most	open	porch	remains	settle
mother	opinion	position	remark	seven
mountain	opposite	possibly	remember	several
mouse	orange	possible	rent	sew
mouth	orchard	post	repair	shade
move	order	potato	repeat	shadow
much	other	pound	reply	shake
mud	ought	pour	report	shall
must	our	power	request	shape
myself	ourselves	prefer	rest	sharp
nail	out	present	result	she
name	outside	president	return	shed
narrow	over	press	ribbon	sheep
nature	own	pretty	rich	shell
naughty	package	price	ride	shine
near		principal	right	ship
	page	print	ring	shirt
nearly	paid	prison	river	shock
necessary	pail		road	shoe
neck	paint	private	roar	shop
need	pair	probably	rock	short
negro	paper	proceed	roll	should
neighbor	parents	promise		shoulder
neither	park	prompt	roof	-
never	parlor	proper	room	shout shovel
new	part	property	rope	and the second se
newspaper	particular	pull	rough	show
next	party	pump	round	shut
nice	pass	pumpkin	row	sick
nickel	past	punish	rubber	side
night	pay	pure	rug	sight
nine	peanut	purpose	rule	sign
ninety	pear	purse	run	silk
no	peculiar	push	rush	silver
noble	pen	put	sack	simple
noise	pencil	quarrel	sad	since
none	people	quarter	safe	sing
noon	perfect	queer	said	sink
2000 1000 1000		and a state of the		

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		41-4	A	mhile
sir	steal	that the	try turkey	while whip
sister	steel			whistle
sit	steep	theater	turn	
six	stick	their	twelve	white
sixty	stiff	them	twenty	who
size	still	themselves	twice	whole
skate	stockings	then	two	whom
skin	stone	there	ugly	why
sky	stood	therefore	unable	wide
sleep	stop	these	uncle	wife
sleeve	store	they	under	will
slide	storm	thick	anderstand	win
slip	story	thin	unless	wind
small	stove	thing	until	window
smell	straight	think	up	winter
smile	street	third	upon	wire
smoke	strange	thirty	use	wish
smooth	straw	this	useful	with
snake	strike	those	usual	within
snow	string	though	vacation	without
SO	struck	thought	vegetables	woman
soap	study	thousand	very	women
society	stuff	thread	vessel	wonder
soft	subject	three	view	wonderful
soil	succeed	throat	village	wood
sold	success	through	visit	word
sole	such	throw	visitor	world
solid	sudden	thunder	voice	worry
some	suggest	ticket	volume	worth
somebody	suit	tie	vote	wound
something	summer	tight	wagon	wreck
sometime	sun	time	wait	write
son	supper	tip	wake	wrong
song	supply	tire	walk	wrote
soon	support	to	wall	yard
sorrow	suppose	today	want	year
sorry	sure	together	war	yellow
sound	surprise	told	warm	yes
soup	sweat	tomorrow	wash	yesterday
south	sweep	tongue	waste	yet
SOW	sweet.	tonight	watch	you
speak	swim	too	water	young
special	swing	took	wave	your
spell	system	tooth	way	
spend	table	top	we	
spirit	tack	total	weak	
splendid	tablet	touch	wear	
spoil	tail	toward	weather	
spoon	take	town	weed	
sport	taste	toy	week	
spot	talk	track	weigh	
spread	tax	train	weight	
spring	teach	tramp	well	
square	teacher	travel	went	
stack	team	traveler	were	
stairs	tear	treasure	west	
stamp	tease	tree	wet	
stand	telephone	trip	what	
star	tell	trouble	wheel	
start	ten	true	wheat	
state	term	truly	when	
station	terrible	trunk	where	
stay	than	trust	whether which	
steady	thank	truth	which	

One Hundred Spelling Demons

read

said

says

seems

shoes

since

some

súre

tear

their

there

they

tired

though

through

to-night

straight

separate

ready

ache again always among answer any been beginning believe blue break built business busy buy can't choose color coming cough

could country deer doctor does done don't early easy enough everv February forty friend grammar guess half having hear heard

here hoarse hour instead just knew know laid loose lose sugar making many meant minute much none often once piece raise

too trouble truly Tuesday two used verv wear Wednesday week where whether which whole women won't would write writing wrote

Bibliography

Ayres, L. P., "A Measuring Scale for Ability in Spelling"..... Russel Sage Foundation

Teachers College, Columbia University Cook and O'Shea, "The Child and His Spelling".....Bobbs Merrill Co. Corman, O. P., "Spelling in the Elementary School".....Ginn & Company Hollingworth, Leta S., "The Psychology of Special Disability in Spelling." Pages 14, 16, 38-39, 42, 53-58, 60-67, 79-80. Jones, W. F., "Concrete Investigation of the Material of English Spelling"......The University of South Dakota Monroe De Voss and Kelly, "Educational Tests and Measurements." Pages 112-144.......Houghton-Mifflin Co. Rice, J. M., "The Futility of the Spelling Grind"......Forum, Vol. XXIII Starch Daniel "The Measurement of Efficiency in Spelling".

Starch, Daniel, "The Measurement of Efficiency in Spelling"......

Journal of Educational Psychology, Vol. VI Journal of Educational Psychology, Vol. VI Tidyman, W. E., "The Teaching of Spelling"......World Book Company Wallin, J. E. W., "Spelling Efficiency in Relation to Age, Grade and Sex and the Question of Transfer".....Warwick and York

Suggestive Spelling Books

Book 1, Grades 1, 2, 3, 4. Book 2, Grades 5, 6, 7, 8. Pearson & Suzzallo, "Essentials of Spelling.....American Book Company Earson & Suzzano, "Essentials of Spelling.....American Book Company Essentials of Spelling, Lower Grades, 2 to 4.
Essentials of Spelling, Middle Grades, 5 to 6.
Essentials of Spelling, Higher Grades, 7 to 9.
Starch-Merick, "The Test and Study Speller"......Silver-Burdett Company First Book, Grades 2 to 4.

Second Book, Grades 5 to6. Third Book, Grades 7 to 8. Horn-Ashbaugh Spellers......Lippincott



