A COURSE OF STUDY

FOR

THE PUBLIC SCHOOLS OF COLORADO

ISSUED BY
THE DEPARTMENT OF PUBLIC INSTRUCTION
MARY C. C. BRADFORD, Superintendent
1926

Volume I

OUTLINE COURSES FOR ELEMENTARY SCHOOLS

The power to think straight, work hard, play fair, and love much is the test of an educated, efficient human being.—M.C.C.B.

Prepared by
MARY C. C. BRADFORD
AND CO-OPERATING EDUCATORS

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NOTICE

Teachers of Colorado:

This volume is public property and is not to be removed from the district when you leave.

The State of Colorado provides these books, paying for them from the State School Fund. They are ordered by your County Superintendent for use by any teacher who may be in charge of the school where you are now teaching.

Mary C. C. Bradford.

State Superintendent of Public Instruction.

FOREWORD

When all is said and done, the elementary schools must inevitably remain the keystone of the arch of education. It is but a truism to say that the foundation must be well laid or all else goes awry. Particularly is this true in a country like ours, where even yet the majority of our children leave school when they have completed the elementary grades.

To me, therefore, and I trust to all the elementary teachers of Colorado, the kindergarten, the primary and grammar grade teachers are the priests, prophets and apostles of civilization. To this group I give greeting and congratulations that they have been chosen to serve in this high calling.

Mary C. C. Bradford.

State Superintendent of Public Instruction.

INDEX

ACKNOWLEDGMENT

The Department of Public Instruction is deeply grateful and very proud of the skillful and unselfish service rendered by the co-operating educators of Colorado in the production of this "Revised Curriculum." In the name of Colorado and her nearly three hundred thousand children of school age, and her nine thousand teachers, the State Superintendent of Public Instruction desires to express the certain hope that the use of these volumes will ennoble and enrich school usages in this state.

A knowledge that one has rendered a service of vital value is the supreme reward of work well done. Therefore the co-operating educators of this state have reason to rejoice in the sacrifice they have made of time and thought for the benefit of Colorado's children.

The Curriculum Revision Committee consists of the following chairmen and their committees:

Mr. A. L. Threlkeld, Denver, Colorado, Vice-Chairman.

Miss Nellie J. Corkish, Deputy Superintendent of Public Instruction.

*Mr. R. R. Bartholomew, County Superintendent of Schools, La Junta.

Mr. C. G. Sargent, Professor of Rural Education, State Agricultural College, Fort Collins.

Dr. Samuel Quigley, President, Western State College of Colorado, Gunnison.

Dr. L. Thomas Hopkins, Assistant Professor of Education, University of Colorado, Boulder.

Mr. W. D. Armentrout, Director of Training Schools, State Teachers College, Greeley.

Miss Emma T. Wilkins, Fort Collins, Colorado.

Mrs. Gretta Pottenger, Carbondale, Colorado.

Mrs. Della Winder, Hugo, Colorado.

Mrs. Minnie Utter, Lamar, Colorado.

Miss Jennie Tressel, Superintendent, Bear Creek Consolidated Schools, Morrison, Colorado.

Mr. J. H. Shriber, Assistant Professor of Education, University of Colorado, Boulder.

*Colorado schools suffered a great loss in the passing of Superintendent R. R. Bartholomew in the spring of 1926. His valued contribution to this curriculum was that of health teaching.

Mary C. C. Bradford.

State Superintendent of Public Instruction.

Guiding Principles Underlying the Making of Courses of Study for the County Schools of Colorado

COLLEGE OF EDUCATION
UNIVERSITY OF COLORADO

A. Aim of Education:

1. The chief aim of education is to teach pupils to do better the desirable things that they will do anyhow. This is interpreted to mean both those desirable present activities and assured future needs.

B. Selection of Aims:

1. The aims selected for courses of study must be:
   a. An outgrowth of the aim of education.
   b. Definite enough to outline the field involved.
   c. Specific enough to determine the selection of subject matter.
   d. Practical enough to carry conviction and offer incentive to action on the part of the pupil.
   e. Attainable by a majority of pupils within the prescribed time.
   f. Psychologically sound.

C. Selection of Content:

1. Content selected must have positive justification in relation to the aim. This means that all materials which do not contribute directly to the aims of the subject should be eliminated. For example, if the aim of a required course in clothing for junior high school girls is to teach selection of ready-made clothing, a unit on the construction of middy blouses or any other garment cannot be justified unless one can show that a knowledge of such construction aids the pupil in selection. In the same way, if the purpose of composition is to train pupils in clear, direct, forceful English expression, a study of complex sentences cannot be included in the course of study unless there is a direct relationship between such knowledge and the attainment of the aim.

D. Organization of Subject Matter:

1. Subject matter should be organized in accordance with the following principles:

a. It must be an outgrowth of present activities and interests.
b. It must be of maximum good to the extent to which it is pursued.
c. It must show active and passive topics.
d. It must show the degree of efficiency expected.
e. It must provide for individual differences in ability, training, and probably future destiny.

E. Method:

Subject matter must be presented so as to

1. Accord with modern psychological principles, such as
   a. Proceeding from the known to the unknown technically called conditioned response.
   b. Recognizing that transfer is not general, automatic, and inevitable, but specific and teachable.
   c. Allowing for individual differences in ability and training.
2. Give the desired degree of integration of pupils.
3. Allow pupils to explore their interests, aptitudes and capacities.
4. Reveal to pupils higher phases of life's activities.

F. Each course of study when finally organized should include the following sections:

I. Introduction, which should include
   a. Aim of education.
   b. Specific aims of the course, including
      1. Why selected.
      2. Interpretation.
   c. Outstanding features of content.
      1. Old content eliminated and why.
      2. New content added and why.
   d. General methods of teaching which apply to the course as a whole.
   e. Time schedule per day or week.
   f. Monthly outline of material to be covered.

II. Content, or Content and Method:

In some subjects it is advisable to have a section on contents apart from methods while in others it is impossible to make such a segregation. Whether these sections are given individually or in combination they should include

1. A statement of what is to be taught, arranged by topics.
   a. Whether active or passive.
   b. Whether for skill or appreciational values.
   c. If for skill, the degree desired.
2. Specific teaching directions or type lessons designed to show methods of developing content.
3. References to particular books where needed for special topics.

III. Tests, which should include a discussion of

1. Methods of measuring results.
2. The best standard tests with means of utilizing them.
3. New-type examinations.

IV. Standards of attainment:

This section should include a statement of the minimum attainments in knowledges, skills, appreciations, and habits, which should be expected of pupils. These should be arranged by appropriate periods of time such as semesters, terms, half years, and so forth, according to the units used in the schools. Where courses continue over a period of terms or years, a definite statement of the increases in knowledges, skills, appreciations and habits should be given.

V. Equipment:

Wherever necessary, a list of specific equipment needed in order to carry out the course of study should be given. This should not be interpreted to include the naming of textbooks or the products of particular manufacturers.

VI. Bibliography:

This should include a list of books helpful to teachers arranged by topics or types. The form used should be author, name of book, publisher, year.

FLAG RITUAL

Prepared by Dr. John Grasse

The following patriotic service is to be committed to memory and used daily:

First—Color-bearer enters room carrying the flag. The pupils all rise to their feet and remain standing until the flag leaves the room.

(It is suggested that as much form as possible be given to the matter of bringing the flag into the room and taking it out again. It is more impressive to have a color guard, properly drilled, accompany the color-bearer, and all enter the room to the tap of a drum or the music of a piano. If there is a drummer or a trumpeter among the pupils the assembly may be sounded in the hall before the exercises begin. One color guard can be used to do the work for all the grammar- or high-school grades in the building.)

Second—Salute the flag: "We give our hands, our heads, and our hearts, to our country and to our flag."

(At the command "Salute the flag," the regular army flag salute is given by raising the right hand briskly to the forehead above the right eye, and then bringing the arm to the side.)

Third—Questions and Answers.

Q.: Why do we salute the flag?

A.: Because we desire to honor it.

Q.: Why do we honor it?

A.: Because it stands for liberty, justice and equal opportunities for all those who live under its folds.

Q.: How can we best show our devotion to the flag?

A.: By becoming law-abiding and honest citizens of our country.

Q.: Who are the enemies to our flag?

A.: Every person who strikes at our flag by force of arms or by breaking the laws that have been made to preserve our liberties. Those who violate a public trust are even more dangerous enemies than those who openly fire upon our flag.

Our Duty

Q.: What are our duties as citizens?

A.: Always to defend the honor of the flag at the ballot box; never to sell or buy votes, or permit the election laws to be broken if we can prevent; not to remain silent if we know of dishonesty in public affairs; but to put forth every effort for the punishment of those who are guilty of such crimes.

Above all, to remember that we are American citizens, whose duty it is to place the welfare of our country above greed or ambition.

Fourth—Singing of the National Anthem: "The Star-Spangled Banner."

SALUTE TO THE FLAG

I pledge allegiance to the flag of the United States of America and to the Republic for which it stands. One nation, indivisible, with liberty and justice for all.

"We give our hands, our heads, and our hearts to our country and our flag."

ARITHMETIC

Numbers

First Grade

I. Specific objectives:

1. Create and develop a love of fair play and honesty by encouraging a proper attitude in games involving numbers.
2. Foster social attitude resulting from games, contests, and other activities in which number is involved.
3. Form concepts of size, number as a collection, arrangement concepts, form concepts, and concepts of time.
4. Emphasize the content suggested under II-2, Standards of attainment.

II. Content of course:

1. Subject matter:

A. First quarter.

1. Rote counting, counting from 1-10.
2. Rational counting from 1-10.
3. Learning the symbols from 1-10.
4. Learning to count from 10-20.
5. Concepts of size, number as a collection, arrangement, form, and time.
6. Recognize penny, nickel, dime, quarter, half dollar, and dollar.

B. Second quarter.

1. Counting by 10's to 100.
2. Counting by 5's to 100.
3. Counting by 1's to 100.
4. Develop idea of units of measure such as inch, foot, yard, pound, quart, day, hour, minute, week, and month.
5. Use the bank project to teach U. S. money. Teach penny, nickel, dime, etc.

C. Third quarter.

1. Continued practice in units of measure.
2. Counting to highest page number in the reader.
3. Greater knowledge of U. S. money.

2. Standards of attainment:

A. The informal nature of number work in the first grade makes it difficult to say just how much shall be taught. The teacher should not feel she is limited to the following attainments. If the experience of the school room calls for other facts, develop them, but do not create an artificial situation in order to motivate a number lesson. Everything that is presented is not taught, and the teacher should guard against confusing the child with a mass of unrelated facts.

B. Attainments:

1. Ability to recognize different coins and a knowledge of how many pennies are equivalent to a nickel, how many pennies are equivalent to a dime, and how many nickels are equivalent to a dime.
2. General idea of the units of measure such as inch, foot, yard, pound, quart, day, hour, minute, week, and month.
3. Ability to recognize number symbols from one to the highest page number in the readers which are used and to make correctly the symbols used in first grade writing.
4. Counting:
   (a) Rote counting: by 1's to 100; by 10's to 100; by 5's to 100.
   (b) Rational counting—as far as there is a felt need.
   (c) Serial meaning of a number as illustrated by the following: 3 is more than 2 and 6 is less than 10.
   (d) Group meaning of a number or the ability to recognize the number in a group without counting.
5. Combinations:
   (a) Give such simple addition and subtraction combinations as the number experiences of the first grade demand.

(b) Keep a careful record of all combinations taught. Give frequent tests the latter part of the year to determine what has really been taught.

(c) At the close of the year file a complete statement of the combinations taught with the individual record of each child to be used as a guide for the second grade teacher.

6. Projects:

Under "Suggestions as to method" are listed a number of activities which develop number sense. It is well to keep in mind that "a project" is a *"purposeful activity"*, which leads to further "activity", and plan in large units for the work in numbers correlating it with every subject in the curriculum.

III. Suggestions as to method:

1. Activities:

A. Use daily school room experiences to develop the following concepts:

1. Size concepts.
Longer, longest, taller, tallest, bigger, biggest, smaller, smallest, thin, fat, middle sized, narrow, wide, thick, high, low, large, shorter, and shortest.

2. Number as a collection.
Two eyes, two ears, five fingers on the hand, a bunch of flowers, a group of children, and such terms as few, many, little, etc.

3. Arrangement concepts.
Develop meaning of up, down, over, under, top, bottom, right, left, front, back, etc.

4. Form concepts.
Experiences with triangle, circle, square, and rectangle.

B. Games involving number relations:

1. Ring toss.

Keeping record of individual as well as class records. Simple counting.

2. Ring hook.
   Recognition of symbols from 1 to 10 with their meaning. Keeping a record of individual scores made.
3. Bean bag.
   Simple counting of scores, at first by 1's, later by 5's and 10's.
4. Ten pins.
   Keeping class and individual scores.
5. Dominoes.
   Matching dots, or matching dots with correct number symbols.
6. Parchesi.
   Reading numbers on number wheel and keeping score.
7. Lotto.
   Reading numbers and matching numbers from 1 to 100.

C. Records:

1. Attendance record.
   Keeping a record of number present, number absent, and number tardy. Simple counting and use of the calendar and clock are outcomes.
2. Health records.
   Keeping a record of the number who drink milk, have tooth brushes, clean hands, etc.
3. Height and weight records.
   Keeping a record of height, weight, gains, and losses. This is a beginning of a knowledge of pounds and ounces.
4. Birthday calendar.
   Keeping a record of the number of children whose birthdays appear each month and the dates of each. A knowledge of the calendar, names of the months, days of the week, etc., are valuable outcomes.

D. Miscellaneous activities:

1. Paste making.
   Relationship of quantities in the amounts of the different materials needed in making the paste. A knowledge of the use of cup, teaspoon, and pound.

2. Savings bank.

Each child brings his pennies to school and deposits them in the room bank. The teacher and the pupil should each keep a record of the deposits made. When the deposits reach a dollar in the school bank a check is written on the first grade account. The child endorses the check and takes it to the city bank where he starts a savings account of his own. He continues to deposit in the school bank until he gets another dollar.

The following outcomes from the above project are valuable:

(a) Starts the habit of saving.

(b) Acquaints the child with bank procedure, meaning of interest, etc.

(c) Knowledge of money: that ten pennies make a dime; five pennies, a nickel; two nickels equal a dime. He also learns to count by dimes with 10's. by 5's with nickels. It gives a real motive for counting the higher numbers.

3. Planting narcissus bulbs.

(a) Counting the number of bulbs planted.

(b) Making a record of the date bulbs are planted.

(c) Keeping a record of number of days bulbs were in the dark.

(d) Estimating date bulbs should be brought to the light.

(e) Measuring height of one bulb when brought to the light.

(f) Measuring its growth weekly.

(g) Counting the number of stalks of flowers.

(h) Counting to discover which stalk has greatest number of blossoms.

(i) Counting days bulb is in the light before it blooms.

(j) Counting days it remains in bloom.

The outcomes in the use of the calendar, counting, use of foot rules, etc., are obvious.

4. Parties.

During the year, Thanksgiving, Hallowe'en, Christ-

mas, Valentine's Day and birthday parties occur and furnish opportunities for number experiences.

(a) Hallowe'en Party.

1. Planning and making decorations provides for estimating distances.
2. Planning and wording invitation; making invitation; favors; refreshments, kind, quantity, and cost; estimating number of guests, chairs, plates, etc., all suggest opportunities for developing numbers.

5. General.

(a) Distributing material.
(b) Reading house numbers.
(c) Reading telephone numbers.
(d) Reading post office box numbers.
(e) Counting children in class and many other similar counting experiences.

IV. Books for Teachers:

1. Stone—How to Teach Primary Numbers. Benj. H. Sanborn & Co., Chicago.
2. Stone—The Teaching of Arithmetic. Benj. H. Sanborn & Co., Chicago.
3. Thorndike—The Psychology of Arithmetic. The Macmillan Co., Chicago.
4. Thorndike—New Methods in Arithmetic. Rand, McNally & Co., Chicago.
5. Courtis—Teachers Manual—Diagnosis of Difficulties—Remedial Suggestions. World Book Co., Yonkers, New York.
6. National Society for the Study of Education. Year books number 16, 17 and 20—also consult current numbers. University of Chicago Press, Chicago.
7. Harris, A. V. S., and Waldo, L. M.—First Journeys in Numberland; also a teacher's edition with manual in same volume (1922). Scott, Foresman & Co., Chicago.

Numbers

Second Grade

I. Specific objectives:

1. Foster a social attitude, resulting from the use of number in games, contests, and other similar activities.
2. Encourage a love of fair play and develop honesty in relation to the child's own self and his associates.
3. Develop concepts of size, number as a collection, number as succession or repetition, group carried in mind as a basis of judgment, group as a unit, number as a place in a series, and number as ratio. See content for explanation.
4. Ability to tell time, use the calendar intelligently, read the thermometer, keep scores in simple games, and make change combinations up to one dollar accurately and quickly.
5. Master the content suggested for each quarter.

II. Content of course:

A. First quarter:

1. Review slowly and check carefully all the work of the first grade. Give test on the list of first grade attainments and compare with the record of individual results filed by the first grade teacher.
2. Counting by 1's to 100 and back; 2's to 100 and back; 3's to 39, beginning with 1 and 2 as well as beginning with zero.
3. Develop number concepts through projects. (See III, Suggestions as to Method.)
4. Read the thermometer daily at different hours in the day.
5. Have each child make a calendar, using measurements. Consult this calendar daily.
6. Learning to tell time. Teach Roman numbers as needed.
7. Develop time sense, using the terms seconds, minutes, hours, days, weeks, and months.
8. Addition and subtraction.
   a. Present, develop, drill, and use the 99 addition facts. Use the inverse subtraction cases.
   b. Teach signs plus (+) and minus (—) and the meaning of add, sum, etc.

B. Second quarter:

1. Review and test on the work of the first term.
2. Continue calendar, clock, and thermometer experience begun in the first quarter.
3. Counting.
   a. Counting by 4's to 48 beginning with 1, 2, and 3 and then counting backward by the same number, e. g., 1, 5, 9, 13, etc.
   b. Counting by 5's to 100 beginning with 1, 2, 3, and 4; then counting back.
   c. Counting by 10's to 100 beginning with 1, 2, 3, etc.
4. Reading and writing numbers to 200.
5. Measures: Present dollar, half dollar, and quarter; dime, nickel, and penny; inch and square inch; ounce, pound, pint, quart, and gallon.
6. Addition: Facts completed. Work for speed and accuracy. Single column addition of not more than five numbers. Teach association of numbers that form easy combinations. In adding 9 associate it with 10.
7. Subtraction: Inverse addition facts. Prove all results thus: 9 is correct because $\begin{array}{r} 4 \\ -5 \\ \hline \end{array}$ $\begin{array}{r} 5 \\ \hline 9 \end{array}$

   Teach the meaning of difference, remainder, less, etc.
8. Fractions: Develop halves and fourths through school room experiences.

C. Third quarter:

1. Review and test on all work presented in second term.
2. Continue clock, calendar and thermometer experiences.
3. Counting: Continue counting by 2's, 3's, 4's, 5's, and 10's beginning with different numbers; count backward in the same manner.
4. Reading and writing numbers so far as real need exists; probably 300 is as high a page number as they will need during the year.
5. Measures: Continued experiences with dollar, half dollar, and quarter; dime, nickel and penny; inch and square inch; ounce, pound, pint, quart and gallon.

6. Addition: Written addition numbers of two orders with not more than two in a column. In adding 9 associate it with 10.

7. Subtraction: No so-called "borrowing" problems are attempted in this grade. Emphasize such arrangements as

$$\begin{array}{ccc} 17 & 27 & 37 \\ -9 & -9 & -9 \end{array}$$

etc., and insist on checking all results.

8. Multiplication.

Teach by means of the factoring method the following:

$$4 = 2 \times 2, \quad 6 = \begin{array}{l} 3 \times 2 \\ 2 \times 3 \end{array}, \quad 8 = \begin{array}{l} 2 \times 4 \\ 4 \times 2 \end{array}$$

$$9 = 3 \times 3, \quad 10 = \begin{array}{l} 2 \times 5 \\ 5 \times 2 \end{array}, \quad 12 = \begin{array}{l} 3 \times 4 \\ 4 \times 3 \\ 2 \times 6 \\ 6 \times 2 \end{array}, \text{ etc.}$$

through 40. Show that multiplication is a short method of addition.

9. Fractions.

Continue use of ½ and ¼ and teach 1/3 and 1/6 if the need arises.

2. Standards of attainment:

A. Keep careful records of all attainments, such as test results and make these a part of the report to the third grade teacher. Tests should be given frequently.

B. Attainments.

1. Ability to recognize all coins.
2. A general knowledge of the units of measure and their accompanying symbols.
3. Ability to count without hesitation by 1's to 100; 2's to 100; 5's to 100; 10's to 100.
4. Ability to pass the addition combination tests of Group I and Group II with a grade of 95 per cent.
5. Ability to score 80 per cent on a factor test of the following numbers: 6, 8, 9, 10, 12, 15, 18, 20, 21, 24, 25.
6. Ability to pass with an acceptable score one standard test recommended by the superintendent.

III. Suggestions as to method:

1. Activities:

A. See first grade for suggestions as to concepts of size, number as a collection, arrangement, and form. Make use of school room activities to develop the following new concepts:

1. Group carried in mind as a basis of judgment. Thus: How many books will be needed for a class? The pupil secures a sufficient number, etc.
2. Number as a place in a series. "Touch the fourth child in the row."
3. Number as ratio.
"Give me half of the pencils."

B. Games involving number relations:

1. Use flash cards for combination drills. Make all drill exercises short and interesting, but constant. Relays, in which the scoring provides for class as well as individual honors, should be given frequently.
2. Keeping scores in all games such as dominoes, ball, target, parchesi, races, ring toss, etc.
3. "I am thinking" game.
The child says, "I am thinking of two numbers whose sum is 10." Other children guess, "Are you thinking of 6 and 4?" After three guesses the answer is given and a new number is selected.
4. Magic squares.
Give each child an envelope containing 9 separate 1-inch squares of cardboard bearing the numbers: 1, 2, 3, 4, 5, 6, 7, 8, and 9. Mix them up and arrange them in the form of a three-inch square so that the sum of the columns each way will be 15. Other numbers may be chosen and several sets will prove profitable seat work.
5. Tit-tat-toe, magic wheel, guess my number, and many similar blackboard games should be encouraged.

C. Records:

1. Attendance record.
Keep record of the number present, number tardy,

etc. Weekly reports by the children. Use clock and calendar in every possible connection.

2. Health records.
   Weight, height, number who gain, and amount of gain, losses, etc. Each child may keep an individual record.
3. Continue birthday calendar begun in the first grade.
4. Spelling records.
   Keep records of the weekly tests in spelling. Use simple graphs to indicate the number of times a word was missed. Let each child keep such a graph. The same kind of record may be kept for number combinations.

D. Construction activities:

1. Make use of measurements in folding, cutting, weaving, designs for booklet covers, Christmas gifts, and valentines. Utilize every opportunity to correlate numbers and construction.

E. Miscellaneous activities:

1. Banking.
   Continue the banking project as outlined in the first grade.
2. Parties:
   Observe special days by programs, parties, etc. Make use of number opportunities in decorations, refreshments, games, etc.
3. Play cafeteria. (See Twentieth Year Book, Part I, page 29). The children should be taken to a real cafeteria, before establishing the "Play Cafeteria," to determine materials needed, such as trays, dishes, etc.

   Picture cards of foods cut from magazine, toy money, menu card, what constitutes a well-balanced lunch, etc.—are a few topics to be considered in developing the project. The outcomes are knowledge of number facts, ability to estimate and check results, cooperation, and greater appreciation of labor.
4. Postoffice.

   Real postoffice experiences such as buying stamps,

determining the cost of sending articles by parcel post, consulting postal regulations (a booklet of regulations may be obtained from the local postoffice), and making change should all receive attention.

The schoolroom postoffice at Christmas, Valentine's Day, Easter, etc., may furnish many opportunities for number development. Measuring for envelopes, stamps, and postcards, determining the number of helpers needed, and making change are a few of the possibilities of the resourceful teacher.

F. Testing.

Weekly home-made tests should be given. Records should be kept and the progress noted. Standard tests should be given as directed by the superintendent.

The following plan is suggested as a means of recording the results of a test:

Name	5 3	8 2	7 6	Total
John Smith	X		X	2
Ruth Brown				0
Totals				

From such a diagram the teacher can see the combinations that cause greatest difficulty to individuals, also which ones are troublesome to the class.

The grouping suggested below is recommended by Dr. Hillegas. The test is arranged so no adjacent problems have the same answer; also no two adjacent problems have the same numbers.

Subtraction:

Take sum—the upper figure, multiplication: Simplify, change sign to X.

Division:

Take product of two numbers ÷ by upper number.

Note: Multiplication and division combinations are not used as tests in the second grade and are given here only to show how the same test may be changed to serve several purposes.

Group I

4	1	0	5	6	0	5	1	5	1		
3	5	3	2	3	1	4	6	0	1		
3	0	4	8	7	6	4	3	2	3		
2	9	4	1	0	2	1	0	2	5		
0	4	1	6	1	4	0	3	2	1		
7	2	8	0	2	5	8	3	6	0		
0	1	2	3	0	2	1	2	3	2	0	5
6	3	5	6	5	4	7	0	4	1	4	1
2	8	7	6	0	3	2	5	4	7	9	1
3	0	2	1	2	1	7	3	0	1	0	4

Group II

7	6	7	8	9	7	9	8	7	8
9	8	5	3	1	4	6	2	6	4
3	5	4	8	2	6	3	9	4	9
7	9	6	5	9	7	8	7	8	2
8	3	2	4	5	8	9	6	8	6
7	9	8	9	7	8	9	5	9	6
7	6	7	9	7	6	9	5	8	9
4	9	3	5	8	4	6	5	6	4
7	5	1	5	9					
7	8	9	6	3					

IV. Books for teachers:

1. Stone—How to Teach Primary Numbers. Benj. H. Sanborn & Co., Chicago.
2. Stone—Teaching of Arithmetic. Benj. H. Sanborn & Co., Chicago.
3. Thorndike—The Psychology of Arithmetic. The Macmillan Co., Chicago.
4. Thorndike—Arithmetic Book I. Rand McNally & Co., Chicago.
5. Thorndike—New Methods in Arithmetic. Rand McNally & Co., Chicago.
6. Courtis—Teacher's Manual—Diagnosis of Difficulties—Remedial Suggestions. World Book Co., Yonkers, N. Y.
7. National Society for the Study of Education—Year Books Nos. 16, 17, and 20, also consult current numbers. University of Chicago Press, Chicago, Ill.
8. Harris, A. V. S., and Waldo, L. M.—First Journeys in Numberland; also teacher's edition with manual in same volume. Scott, Foresman & Co., Chicago.

Numbers—Third Grade

I. Specific objectives:

1. Ability to use knowledge gained in the solution of simple problems.
2. Create a social attitude resulting from the use of contests, games, and their similar activities.
3. Foster a love of fair play and develop honesty.
4. Develop proper habits of organization of work, neatness of appearance in written work, and verifying answers by checking results.
5. Develop pride in speed and accuracy.
6. Master the content suggested for each quarter.

II. Content of course:

1. Subject matter.

A. First quarter:

1. Review slowly and check carefully all the work of the second grade. Test on the list of second grade attainments and compare with the record of individual results filed by the second grade teacher.

2. Counting:

   Counting by 2's, 3's, 4's, 5's, 6's, 7's, 8's and 9's, beginning with different numbers and going to 100 and back.

3. Addition and subtraction:
   a. Review addition of 9.
   b. Teaching addition of doubles and next higher combination thus: 7 plus 7 equal ( ) and 7 plus 8 equal ( ), etc.
   c. Addition and subtraction involved in making change for sums of $5.00 or less.
   d. Rapid oral drill on single columns. Written problems involving checking.

4. Multiplication and division:
   a. Teach the multiplication tables of 2 and 3 and the corresponding division tables. Present the factors of 4, 6, 8, 9, 10, 12, 14, 15, 18, 20, 21, 24, 25, 27, 30, 35, and 36, at this time. (See second grade for form).
   b. Test frequently on facts which have been presented.

5. Terms used:
   a. Review terms: *and, add, addition, sum, take away, subtract, minus, subtraction, difference.*
   b. Teach new terms: *multiply, times, multiplication, divide, division.*

6. Measures:
   a. Use inch and one-half inch, all change making combinations on one dollar, and ounces and pounds in weighing.

7. Fractions:

   Use of ½ and ¼.

8. Reading and writing numbers:

   Read and write numbers as high as the need for numbers is felt.

9. Carrying and so-called "borrowing" should be introduced.

B. Second quarter:

1. Review facts taught during the first quarter.
2. Continue counting by different numbers beginning anywhere under 10 and counting to 100 and back.
3. Addition and subtraction.
   a. Two and three column addition introducing carrying. Teach checking and insist upon its use.
   b. Subtraction:

      Introduce "borrowing" through dollars and cents. Show the ratio that exists, calling units, "pennies place;" tens "dimes place;" and hundreds, "dollars place." Go from subtraction problems involving United States money to problems of two and three places which are not based upon money. Make use of measures, school and home experiences, and all possible concrete material to make subtractions more simple. Teach checking as a means of discovering if results are correct, and insist on the checking of every problem.
4. Multiplication and division:
   a. Teach through factoring the remaining multiplication facts: 40, 42, 45, 54, 56, 63, 64, 72, 81, using the following form: $40=8\times5$
      5×8

      also show 5 eights in column addition and 8 fives as an addition problem.
   b. Organize multiplication tables of 5's, 6's, 7's, 8's, and 9's.
   c. Organize division tables through the 9's.
5. Measures:
   a. Linear measure:

      12 inches = 1 foot.

      3 feet = 1 yard.
   b. Liquid measure:

      2 cups equal 1 pint.

      2 pints equal 1 quart.

      4 quarts equal 1 gallon.

c. United States money:
5 cents equal 1 nickel.
2 nickels equal 1 dime.
10 cents equal 1 dime.
5 nickels equal 1 quarter.
4 quarters equal 1 dollar.
(Many of the above facts have been previously taught but they should be organized as a table in the third grade).

6. Reading and writing numbers:
Teach reading and writing of numbers as the need arises.

7. Fractions:
Review work of previous grades and introduce 1/3. Make opportunities to correlate measurements in construction problems and arithmetical facts. (See suggestions under III).

C. Third term:

1. Review all work previously presented; give frequent tests; keep graphs and records (See Second Grade for illustrations) of individual progress. Keep records on charts where children may consult them and compare results.

2. Continue counting as suggested in second quarter.

3. Addition and subtraction:

a. Continue concrete problems; provide for a great deal of rapid, oral drill work. So called "string problems" are good, such as 9 plus 8 plus 7 plus 3 plus 2 take away 7, take away 4, and divide by 2. Call for several answers before announcing the correct result.

b. Select from good standard arithmetic texts problems which are suitable for this grade. Teach children to *read* and *intrepret* problems.

4. Multiplication and division:

a. Multiply numbers of three places with a multiplier of one place.

b. Teach meaning of *multiplication*, *multiplicand*, and *multiplier*.

c. Short division following the method increasing the remainder, thus beginning with a remainder of one, then two, etc.

5. Measures:

a. Review all previous work.

b. Organize time table:

60 seconds equal 1 minute.
60 minutes 1 hour.
24 hours equal 1 day.
7 days equal 1 week.
4 weeks equal 1 month.
30 days equal 1 month.
365 days equal 1 year.

c. Teach the rhyme about "Thirty days hath September," etc.

6. Roman numerals:

Teach Roman numerals as far as chapters in the books demand—probably to XXV.

III. Standards of attainment:

A. Certain goals in each phase of number work should be before the children throughout the year; thus, ability to work all addition and subtraction combinations within a given time limit is a goal or achievement for which they should strive.

1. Ability to score 90 in a test on the 99 addition combinations within a time limit of ..... seconds. (See Dr. Hillegas test, Second Grade).
2. Ability to score 90 in a subtraction test limited to ..... seconds.
3. Ability to score 85% in multiplication and division tests based on Dr. Hillegas' Combination arrangements. No time limit.
4. Ability to pass a test arranged by the teacher on recognition of measures. Use linear, U. S. money, time, and avoirdupois tables.
5. Ability to score 80% in a test on the factors of 28, 81, 27, 72, 25, 30, 63, 40, 42, 64, 35, 48, 21, 54, 45, 36, 49, 18, 56, and 20.
6. Ability to pass with acceptable score one standard test recommended by the superintendent.

IV. Suggestions as to method:

1. Activities:

A. Make use of playground, school room, commercial, and home experiences to develop number sense.

B. The school room store. Equipment for the store may be obtained free from Educational Foundations, 23 Flatbush Avenue, Brooklyn, N. Y. or from various companies. The making of price lists, tags, bills, etc., give the children valuable experience in proper forms, and a knowledge of standard prices and what constitutes legitimate profit.

C. Games:

1. Flash cards of addition, combination, factor cards, etc., may be used to good advantage if the element of a game is introduced. Select five or six of the best flash cards games you know, use these consistently, and note the individual progress in speed. Avoid games that allow only the quickest and most accurate to take part. Provide for the child who misses to get back into the games as he is the one who needs the drill the most.

2. Continue playing lotto, dominoes, parchesi, ring toss, ten pins, and other games begun in the first and the second grades.

3. Outdoor games:
Encourage classroom reports of baseball scores, volley ball, and other outdoor games. Keep a chart of such records.

D. Parties:

1. Continue celebration of holidays and utilization of number opportunities. Third grade children may make refreshments under supervision. Accurate measurements of teaspoon, cup, etc., in making cocoa, the relation of cup and pound in candy making, how to increase a recipe, etc., are some of the number outcomes.

E. Records:

1. Continue health, attendance and birthday records in the first and the second grades. Also keep weather

records, thermometer readings, etc. In this grade children may obtain the averages for a week.

F. Miscellaneous activities:

1. Continue in a more elaborate manner the banking project begun in the first and the second grades.

2. Personal account books:

Teach children how to keep personal accounts. Have them enter all their expenses for a week or month; and give oral reports showing balances, etc.

3. Problem books:

Have each child keep a problem book. Teach children how to state their own problems in a clear, concise manner. The following is a typical problem: "My father bought me a suit which cost $12.50. He gave Mr. Miller $15.00. Mr. Miller gave him $2.50 in change."

4. Seating plan:

A plan of the room may be drawn using a regular scale for measurements. A seating plan with each child's name in its proper place may be added.

5. Construction activities:

In this grade accurate measurements should be required in the making of construction problems. Blotters, match scratchers, calendars, checker boards, etc., are a few of the problems which demand a use of measurements.

G. The place of a text:

No text is required or desired in this grade, but many books may be consulted to supplement the work given in other ways. Books may be used to suggest methods, organize subject matter, and furnish materials for drills and reviews. The following is a partial list of books which contain good problems:

V. Books for teachers:

1. Stone: How to Teach Primary Numbers. Benj. H. Sanborn & Co., Chicago.

2. Stone: The Teaching of Arithmetic. Benj. H. Sanborn & Co., Chicago.
3. Thorndike: The Psychology of Arithmetic. The Macmillan Co., Chicago.
4. Thorndike: New Methods in Arithmetic. Rand, McNally & Co., Chicago.
5. Harris and Waldo: First Journeys in Numberland; also teachers' edition with manual. Scott, Foresman & Co., Chicago.
6. Courtis: Teacher's Manual. Diagnosis of difficulties. Remedial suggestions. World Book Co., Yonkers, N. Y.
7. National Society for the Study of Education. Year books numbers 16, 17, and 20. Also consult current numbers. University of Chicago Press, Chicago, Ill.

FOURTH TO SIXTH GRADES, INCLUSIVE

I. **Suggestions and Directions to Teachers:**

1. Become familiar with the plan and organization of your textbook, the reasons for the choice of exercises and problems, the order in which they appear, and the methods used.
2. The work should be *intensive* rather than extensive. Many exercises must be used to supplement the text and some sections will have to be omitted; the daily life of the pupils should be used as a source of much problem material.
3. Pupils should be encouraged to do as much of their work *mentally* as possible.
4. About five minutes daily should be devoted to *varied* drill work, especially in the fourth and fifth grades. Devices in drill work must be varied from day to day, that interest, enthusiasm, and competition may be maintained. For bibliography of practice and test material see list below just preceeding the outline for Fourth Grade Arithmetic.
5. Teach new topics from the blackboard and then use the text to fix the work in the minds of pupils.
6. Train pupils to work rapidly, but at the same time, *carefully*. Accuracy in addition, for example, is more important than speed.
7. Teach pupils to arrange work neatly and orderly and to write the figures (only ten of them) legibly, but do not over-emphasize forms of solution of problems.
8. Give pupils much practice in finding approximate answers mentally, in giving orally the steps to be used in solutions of problems, and in *writing answers* to test problems.
9. It is important to grade all work so that the pupils will encounter only one difficulty at a time.
10. Emphasize problems and processes which arise often in every day life; and do not require long explanations of pupils.
11. Be familiar with the course of study in the preceeding grade so that you may plan the review work efficiently at the beginning of the year.
12. In drill work lay emphasis on fractions of small denominations, decimals of one and two digits, small integers, and the common per cents.

13. A great responsibility rests upon the teachers of the early grades for securing *accuracy of expression* in both oral and written work. Such common statements as 4x2/3=8/12, 2x$50=100, 2x50=$100, 4 ft.x5 ft.=20 sq. ft. Let 5/6= the number, 5/6=12, and 7 plus 5=12x2 should not be permitted to go unchallenged.
14. Pupils should be given definite instruction in how to attack "reasoning" problems and should have much practice in attacking problems by the use of a definite set of steps such as (1) reading the problem carefully, (2) finding out what is known and what is required, (3) indicating the operations to be used in the solution, (4) carrying out the computation of operations indicated, and (5) checking results.
15. Pupils should early form the habit of labeling the different steps in the solution of a practical problem, e. g., $60÷4= $15, *the share each received.*
16. It is recommended that in practical and applied problems that one-half credit be allowed for principle or method and one-half credit for accuracy of the final result, in order that the importance of accuracy be kept before the students.

II. General Bibliography of Books and Tests for Use of Teachers in the Fourth to Eighth Grade:

1. Two new books recommended for all teachers of arithmetic.
   a. Brown and Coffman, The Teaching of Arithmetic. Row, Peterson & Co., Chicago, 1925.
   b. Thorndike, E. L., The Psychology of Arithmetic. The Macmillan Co., Chicago, 1924.
2. Other books on the teaching of Arithmetic.
   a. Klapper, P., The Teaching of Arithmetic. D. Appleton & Co., Chicago.
   b. Overman, J. R., Principles and Methods of Teaching Arithmetic; also A Course in Arithmetic for Teachers and Teacher-Training Classes. Lyons and Carnahan, Chicago.
   c. Smith, D. E., The Teaching of Arithmetic. Ginn & Co., Chicago.
   d. Stamper, A. W., The Teaching of Arithmetic. The American Book Co., Chicago.

e. Stone, J. C., The Teaching of Arithmetic. Benj. H. Sanborn & Co., Chicago.

g. Thorndike, E. L., The New Methods in Arithmetic. Rand, McNally & Co., Chicago.

3. Arithmetic scales and tests.

a. Buckingham Scales for Problems in Arithmetic. Public School Pub. Co., Bloomington, Ill.

b. Courtis Standard Research Tests and Standard Supervisory Tests. World Book Co., Yonkers, N. Y.

c. Monroe General Survey Tests and Standardized Reasoning Tests. Public School Publishing Co., Bloominton, Ill.

d. Stone Standardized Reasoning Tests in Arithmetic, Grades 4 to 8 Inclusive. Bureau of Publications, Teachers College, N. Y.

e. Woody Arithmetic Scales. Bureau of Publication, Teachers College, Columbia University, N. Y.

f. Finley, G. M., "A Comparative Study of Three Diagnostic Arithmetic Tests." State Teachers College Bulletin, Greeley, Colo., Series 20, No. 41, 1920.

g. Monroe Diagnostic Tests. Bureau of Research, University of Illinois, Urbana, Ill.

h. Cleveland Survey Arithmetic Tests, Stevenson Problem Analysis Tests, and Wisconsin Inventory Tests in Arithmetic. All three are diagnostic tests published by Public School Publishing Co., Bloomington, Ill.

4. Arithmetic practice exercises.

a. Courtis Practice Exercises. World Book Co., Yonkers, N. Y.

b. Studebaker Practice Exercises. Scott, Foresman & Co., Chicago.

c. Osburn Practice Exercises. Houghton, Mifflin & Co., Chicago.

d. Knight and Ruch Practice Exercises in Arithmetic. Scott, Foresman & Co., Chicago, 1925.

Teachers interested in experimental or research work in teaching arithmetic should write to Dr. F. B. Knight, University of Iowa, Iowa City, for complimentary copies of the experimental editions for the grades in which they are particularly interested. He has editions for grades 4 to 8 inclusive.

ARITHMETIC

Fourth Grade

1. Specific objectives:
   a. To make habitual the addition and subtraction of simple numbers.
   b. To give mastery of the multiplication and division combinations and their use in easy multiplication and long division problems.
   c. To teach the meaning, use, addition, and subtraction of simple fractions and mixed numbers.
   d. To "humanize" the fundamental operations by their use in problems taken from every day life.

2. Most important topics for this grade:
   a. Review of the four fundamental operations and the ninety-nine combinations in each.
   b. Multiplication with integers.
   c. Long division.
   d. Addition and subtraction of simple fractions and mixed numbers.
   e. Uses of fractions.

3. Minimum requirements to be met by the end of the year:
   a. Reading and writing of numbers to 999,999. Avoid use of "and."
   b. Reading and writing Roman numbers to D.
   c. Ability to add a column of three-digit numbers, and to subtract four-digit numbers, accurately and quickly.
   d. Accurate memory of multiplication and division combinations exclusive of the 10's, 11's, and 12's.
   e. Mastery of short division and working idea of long division and long multiplication.
   f. Ability to decide when to add, subtract, multiply, or divide in "one-step" practical problems.
   g. Working knowledge of linear measure (inches, feet, and yards only), square measure (square inches and square feet), U. S. money (cents, dimes, dollars), weights (oz., and lb.) and dry measure (pint, quart, peck, bushel).
   h. Concrete knowledge of simplest common fractions and ability to add fractions like ½, ¼, ¾, 1/3 and 2/3.

4. Outline of Fourth Grade Arithmetic (by periods of six weeks each):

   a. First period. (See general suggestions at the beginning of the syllabus).

      1. Review of addition and subtraction of two-digit numbers. Teach meanings of *addend, plus, minus, minuend, subtrahend,* and *remainder.* One should not hesitate to teach the use of new terms when they are needed, for there is much value in calling things by their real names.
      2. Reading and writing numbers of four, five and six digits. Pupils should not use "and" in reading integers. Teach the names of the *orders*—units, tens (not "tenths" as is often done), hundreds, etc., and the names of the first two *periods*—units and thousands. Also teach the relations between the orders, e. g., 26 equals 2 tens plus 6 units.
      3. Much drill on addition and subtraction of three digit and four-digit numbers. Also drill on any of the forty-five addition combinations or on the forty-five subtraction combinations which the students are slow in applying.
      4. Problems involving the addition and subtraction of integers.

   b. Second period.

      1. Review of, and drill on, the forty-five multiplication combinations. Concentrate on the combinations the students are slow in using; vary the devices in drill; and make lively, competitive drill a regular part of the daily work. It is suggested that each student keep a record of his score in drill work and that the teacher use at the end of the period as a factor in the six-weeks' grade.
      2. Multiplying and dividing by one-digit numbers. Teach the meanings of *multiplicand, multiplier, product, dividend, divisor,* and *quotient.*
      3. Multiplying with two-digit multipliers not containing 0 as a digit; also multiplying by 10 and 100; then multiplying by three digit numbers in which the second digit is zero and finally when the second and third digits are zero.

4. Multiplying with two-digit multipliers. Note applications to dollars and cents problems and other problems such as making house plans, drawing to scale, etc.
5. More practical problems (one-step and two-step problems) involving especially multiplication; also bills and statements. It is suggested that the tables of 11's and 12's be omitted in the fourth grade at least. The quickest way to multiply or divide by 11 or 12 is by *long* multiplication or division.

c. Third period.
1. The fractions ⅓, ¼, ⅕, ⅔, ⅖, ½ objectively taught and then used as parts of an inch, foot, yard, etc.
2. Find thirds, fourths, and fifths of 20, 30, 60, 80, etc., and of other numbers like 5, 10, 12, 24 (no remainders) and use of this in weighing problems, buying eggs, etc.
3. Review of work for first half of year.

d. Fourth period.
1. Review of short division: (a) when there is no remainder; (b) when there is a remainder. Review definitions of *dividend, divisor*, etc. Checking division by multiplying and then adding in the remainder
2. Long division of three-digit and four-digit numbers by 11, 21, 31, 41, 51, etc., and checking. Pupils should put the quotient above the dividend.
3. Long division by 9, 19, 29, 39, etc., using 10, 20, 30, 40, etc., as trial divisors, and checking; also division by 10 and 100.
4. Long division by other two-digit numbers, such as 34, 44, 35, 45, but not many problems where there is a zero in the divisor or quotient.
5. Practical problems involving mostly long and short division.

e. Fifth period.
1. Reading and writing numbers to 999,999. Teach the orders and periods and relation between them. Reading and writing Roman numbers to D.
2. Multiplying and dividing by 10, 100, and 1,000; also division when there is a zero in the quotient.
3. Multiplying by 1½, 2½, 3½, etc. Teach some multiples 11, 12, 13, and 25 if there is time.

4. Review of long division and practice in multiplication and division with larger numbers.
5. Review of meaning of fractions and mixed numbers.
6. Adding like fractions; adding halves and fourths.

f. Sixth period.

1. Subtracting ½ from integers and mastery of subtraction with ½ in the minuend or subtrahend or both.
2. Adding and subtracting mixed numbers with halves and fourths.
3. Adding and subtracting with halves, thirds, fourths, sixths, and eighths.
4. General review in computation.
5. Miscellaneous one-step and two-step problems, applying the above review.

5. Books for Teachers.

a. For books on the teaching of arithmetic and for lists of practice tests, etc., see bibliography above.

ARITHMETIC

Fifth Grade

1. Specific objectives:

a. To increase the pupil's practical knowledge of the use of numbers.

b. To apply the four fundamental operations to common fractions and mixed numbers.

c. To keep the teaching purposive and to have greater motivation of the work.

2. Most important topics for this grade:

a. Mastery of reading and writing numbers to, but not including, trillions, and Roman numbers to M.

b. Fundamental operations with common fractions and mixed numbers.

c. Bills and accounts.

d. Review of long division and multiplication with integers.

e. Much oral, and some written analysis of denominate-number of problems.

f. Plenty of rapid calculation with integers.

3. Minimum requirements to be met by the end of the year:
   a. Reading and writing numbers in millions and Roman numbers to M.
   b. Ability to state *instantly* the product of any two one-digit numbers and the corresponding quotients when integers.
   c. Ability to perform accurately the four fundamental operations with simple common fractions.
   d. Ability to solve quickly and correctly "two-step reasoning" problems.
   e. Ability to do fairly rapid and accurate work in long division and long multiplication.
   f. Ability to make out simple bills and statements neatly and accurately.

4. Suggestions to teachers:
   a. Read carefully the outline for fourth-grade arithmetic and the general suggestions preceding that outline.
   b. Give much drill on the forty-five fundamental combinations in both multiplication and division, keep the drill work interesting, and emphasize the combinations on which the pupils need the most drill. Give some competitive drills.
   c. Insist that the pupils "label" each step in the solution of a written problem, and give some definite instruction on the steps to take in attacking such a problem.
   d. Insist on accuracy in addition.
   e. Give much practice in mental arithmetic.
   f. Do not permit pupils to make such inaccurate statements as "let 5/8 equal $20," or "3 ft. times 4 ft. equal 12 sq. ft.," without seeing that they are corrected.

5. Outline of fifth grade arithmetic:
   a. First period of six weeks.
      1. Reading and writing numbers to millions and Roman numbers to M. Teach orders, periods, and place values.
      2. Drill for accuracy and reasonable speed in (a) addition, (b) subtraction, (c) multiplication. Include plenty of drill on the forty-five combinations in each.
      3. Follow (a), (b), and (c) above in turn with practical one-step and two-step "reasoning problems;" include the laws dealing with abstract and concrete numbers in multiplication, and carefully correct violations of these laws made in solving applied problems.

b. Second period.

1. Thorough review of long division (See fourth grade outline for order of topics, references, etc.).
2. Laws dealing with abstract and concrete numbers. Teach meaning of partitive division as distinguished from measuring division.
3. Applications of division and other operations to weights, time measure, buying and selling, etc.

c. Third period.

1. Fractions: review of *meaning* and *use* of halves and fourths.
2. Comparing halves, fourths, and eighths and practical uses of this in problems.
3. Addition of halves, fourth, eighths, and sixteenths.
4. Addition of mixed numbers involving above fractions and problems applying to this.
5. Subtraction of above fractions and of mixed numbers involving them (a) when the fraction in the minuend is larger; (b) when "borrowing" is necessary.

d. Fourth period:

1. Multiplying integers and numbers representing U. S. money by mixed numbers when the fractional part of the mixed number is halves, fourths, eighths, thirds, or sixths.
2. Bills applying multiplication by mixed numbers.
3. Reduction of fraction (a) to higher terms, (b) to lowest terms.
4. Addition of fractions (L. C. D. small enough to be easily determined by inspection).
5. Addition and subtraction of mixed numbers.

e. Fifth period:

1. Multiplying a fraction by an integer and then multiplying an integer by a fraction. See Stamper's The Teaching of Arithmetic, 72-73 for suggestions.
2. Teach use of 'times" to mean "of".
3. Multiplying by a mixed number when multiplicand is an integer.
4. Multiplying a fraction by a fraction. Teach pupils to use cancellation when possible and make clear the

principle involved, viz.: dividing the numerator and denominator by the same number (not zero) does not change the value of the fraction. Teach tests of divisibility by 2, 3, 4, and 5 here.

5. Reduction of mixed numbers to improper fractions and application of this in multiplying a mixed number (a) by a fraction and (b) by a mixed number. Note: Throughout this period frequent application should be made to one-step and two-step "reasoning" problems.

f. Sixth period:

1. Division of an integer by a fraction and of a fraction by a fraction, and applications to practical problems. See Stamper, op. cit., pp. 205-206 for excellent suggestions on *lesson plans* in division of common fractions.

2. Division of fractions by (a) integers and (b) mixed numbers. Division of mixed numbers by mixed numbers. It is suggested that ratio problems be omitted if the time is limited in this period.

3. Problems in linear measure and finding areas and perimeters of rectangles. See Stamper, op. cit. pp. 212-213 for suggestions on teaching how to find the area of a rectangle. Do not permit pupils to make inaccurate statements such as "5 ft. times 6 ft. equal 35 sq. ft.", or 5 times 6 equal 36 sq. ft., but insist on use of the *units* sq. in., sq. ft., etc.

4. Problems in cubic measure, mostly finding volumes of rectangular solids. Note: It is suggested that throughout the year, frequent drills be given in addition to the regular daily drill work.

5. General review with emphasis upon topics in which pupils need the most practice.

5. Books for Teachers:

a. For biblography of books on method and of practice and test material, see list just preceding outline for Fourth Grade Arithmetic.

ARITHMETIC

Sixth Grade

1. Specific Objectives:
   a. To strengthen judgment and reasoning power.
   b. To encourage independence, originality, and power.
   c. "To inculcate an appreciation of the value of arithmetical ability through the joy of achievement."
   d. To secure accuracy in the four fundamental operations with common fractions and decimals.

2. Most important topics for this grade:
   a. Review of common fractions.
   b. Drill for accuracy and speed in the four fundamental operations with integers, common fractions, and decimal fractions.
   c. Basic facts of percentage with applications introduced.
   d. Short methods (a) of multiplication and division by aliquot parts and (b) of finding per cents by their use as fractions.
   e. Elementary measuration, mostly rectangles and triangles.

3. Minimum requirements to be met by the end of the year:
   a. Reading and writing numbers in trillions and Roman numbers in the thousands.
   b. Ability to perform accurately and rapidly the four fundamental operations with integers, common fractions, and decimal fractions.
   c. A knowledge of the basic facts of percentage.
   d. Ability to use aliquot parts with considerable facility in multiplication and division and in finding per cents of numbers.
   e. Reading and writing decimals to hundred-thousandths.
   f. Ability to solve practical "two-step" and "three-step" "reasoning" problems involving the choice of two or more of the fundamental operations.
   g. How to compute simple interest by one good method when the time is given in years, months, or days.
   h. How to solve problems in trade discount not involving more than two successive discounts.
   i. How to solve simple mensuration problems in areas and perimeters of rectangles and triangles.

4. Suggestions to teachers:
   a. Be familiar with the outline for fifth grade arithmetic. Also read the general suggestions preceding fourth grade outline in arithmetic.
   b. Guard constantly against such common inaccuracies of pupils as: "ought" for "naught"; "goes into"; 2 over 3 instead of "two-thirds"; use of "and" in reading integers; errors such as "2/3 equals $10", or "8% = 40", or "1/6 of $12 = $2 plus $9 = $11"; "add zeros" instead of "annex zeros"; such errors as "three times greater" and "3 ft. square" when "three times as great" and "3 sq. ft." are meant; and the use of "times" as a transitive verb.
   c. Teach pupils to *label* each step in the solution of a written problem; also give some definite instruction in the four or five steps to take in attacking such a problem.
   d. Give some instruction in working to a specified degree of accuracy.
   e. Give some instruction in making out business forms such as checks, notes, bills, and home expense accounts and budgets.

5. Outline of sixth grade arithmetic:
   a. First period of six weeks:
      1. Review of common fractions (see fifth grade outline) review tests of divisibility for 2, 3, 4, and 5, and teach those by 6, 8, and 9; addition and subtraction of common fractions and applications to practical problems; changing mixed numbers to improper fractions; multiplication of fractions and mixed numbers using cancellation; and division of fractions with applications. If there is time some exercises in *ratio* may be given.
   b. Second period:
      1. Factoring. Review the tests for divisibility but omit addition of fractions with large denominators (too large for finding L. C. D. by inspection).
      2. Introduction to decimals. It is suggested that U. S. money be used here. Emphasize the use of "and" to separate the integral and fractional parts.
      3. Reading and writing of decimals to hundred-thousandths. Teach the names of the first four places (orders) to the right of the decimal point.

4. Addition and subtraction of decimals, with applications.
5. Drill in reading, writing, addition and subtraction should be given often during this period.

c. Third period:

1. Changing decimals to common fractions and reduction of same to lowest terms using tests of divisibility.
2. Multiplying decimals by integers and then by 10, 100, and 1,000 by moving the decimal point.
3. Multiplying decimals by decimals and applications.
4. Dividing a decimal (a) by an integer; (b) by a decimal; (c) by 10, 100, and 1,000.
5. "Reasoning" problems involving choice of the four fundamental operations with decimals and integers. Give instruction in how to attack such problems by the use of definite steps such as (1) reading the problem carefully to get what is known, (2) indicating the operations needed to find the required result, etc. Give much mental drill.

d. Fourth period:

1. Reading and writing numbers in billions and Roman numbers in thousands.
2. Review of the four fundamental operations with integers with drills on each.
3. Practical problems involving choice of these operations.
4. Short methods in multiplication by aliquot parts and applications especially to bills. (Much drill).
5. Aliquot parts in division with applications. (Drill).

e. Fifth period:

1. Meaning of per cent, changing common fractions and decimals to per cents, and use of aliquot parts in finding easy per cents of such numbers as 20, 100, 200, etc.
2. Drill in finding per cents by use of ½, ¼, ⅛, 1/5, ⅓, 1/6, ⅔ and ¾, and applications. Omit ratios as per cents if time is short.
3. Problems in finding trade discounts, especially in finding the net cost or net selling price.
4. Easy problems in finding the rate of discount (one-step problems).

f. Sixth period:

1. Review of percentage and applications to discounts.
2. General problems in finding per cents and rates (about two weeks).
3. Simple interest introduced. Use one good method.
4. Simple mensuration, mostly areas, of rectangles and triangles. Review definition and use of perimeter.
5. General review of essential topics of the year.

4. Books for teachers:

a. For books on method and bibliography of test and practice material see bibliography preceding outline for Fourth Grade Arithmetic.

b. Marsh-Van Sickle—The Pilot Arithmetics, Book II. Newson & Co., Chicago.

c. Stone—Arithmetic, Intermediate (1925). Benj. H. Sanborn & Co., Chicago.

d. Stone-Millis—Arithmetic, Intermediate. Benj. H. Sanborn & Co., Chicago.

e. Thorndike—The New Methods in Arithmetic. Rand, McNally & Co., Chicago.

f. Hoyt and Peet—Everyday Arithmetic, Intermediate, Revised. Houghton & Mifflin Co., Chicago.

g. Watson's Simplified Arithmetic, Sixth Grade. (Contains the Monroe Standardized Tests). D. C. Heath & Co., Chicago.

OUTLINE

OF

LANGUAGE

LANGUAGE

First Grade

Teachers should strive to develop in their pupils the desire to talk well and the ability to do so. In order to do this attention must be given the subject in every class. Seven-eighths or more of the language period should be given to oral composition.

Written composition is omitted except as it is correlated with reading in work and sentence building, and copying of occasional short sentences by the end of the year.

Aims:

1. To encourage pupils to talk freely.
2. To develop distinct articulation, a pleasing tone, correct posture, and freedom from self-consciousness.
3. To make the child feel the termination of an expressed thought.
4. To correct speech errors.
5. To require complete statements.
6. To build up a vocabulary.
7. To give greater opportunity for self expression.

A child talks with most zest when discussing some subject of immediate personal interest.

Suggested Topics:

1. Surroundings: Home, Family, Friends, Pets, Games, Toys.
   Industrial Life: Milkman, Postman, Paper Boy, R. F. D. Mail Carrier, Motorman, Freighter, Policeman, Chores, Errands.
   Nature Study: Humaneness, elementary agriculture, home-making.
   Picture Study.
   Ethics, hygiene, good manners.
   Language game.
   Dramatization.
   Memorizing of prose and poetry.

Begin oral work with conversation. Encourage spontaneous self expression. Use child's imagination. Let a child imagine he is an animal, a flower or a bird and tell his story. Ethics, hygiene and good manners may be worked into games and dramatization. Children may be callers at homes or at school, introductions may

be made, chairs offered to visitors, etc. Drill daily to correct speech defects and to improve voices. In correcting common speech errors drill the child who made the error, by first pleasantly substituting the correct form for the child's repetition of the correct form through the use of language games. Require complete statements in answer to questions, discourage superfluous use of connections and cause the child to recognize the termination of his spoken thought.

Requirements (minimum):

Two short simple sentences on a familiar topic, given without direct aid or without errors.

The recitations from memory with clear voice and pleasant expression of at least four selections.

Study one picture each month.

Familiarity with the following technicalities:

Capital:

Beginning of sentence.

Name of Persons.

Word I.

Punctuation:

Period at end of statement.

Question mark.

Be able to write own name and address.

Suggested Stories for Reproduction by the Pupils.

Henny Penny—For the Children's Hour.....C. S. Bailey
Little Red Hen—For the Children's Hour.....C. S. Bailey
Chicken Little—For the Children's Hour.....C. S. Bailey
Roggylug—How to Tell Stories.....S. C. Byrant
Three Bears—How to Tell Stories.....S. C. Byrant
Gingerbread Boy—Tales of Laughter.....Wiggin & Smith
Lion and the Mouse—Tales of Laughter.....Wiggin & Smith
Old Woman and Her Pig—Tales of Laughter.....Wiggin & Smith
Three Billy Goats Gruff—Tales of Laughter.....Wiggin & Smith
Pig Brother—Pig Brother and Other Stories.....L. E. Richards

Suggested Poems:

Whole Duty of Children.....Robert Louis Stevenson
Rain.....Robert Louis Stevenson
Bed in Summer.....Robert Louis Stevenson
Time to Rise.....Robert Louis Stevenson
The Cow.....Robert Louis Stevenson

Where Go the Boats.....Robert Louis Stevenson
Autumn .....Robert Louis Stevenson
I Know.....Riverside First Reader
Little Plants.....Primary Recitations
Dressmaking.....Riverside Second Reader
America (two verses).
Grade Poet—Robert Louis Stevenson.

Suggested Pictures:

Madonna of the Chair.....Raphael
Baby Stuart.....Van Dyke
Feeding Her Birds.....Millet
Saved .....Landseer
Angel Heads.....Reynolds
Can't You Talk.....Holmes
The First Step.....Millet
Family Cares.....Barnes
Portrait of Washington.
Illustrations from Mother Goose.

Suggested Picture Study Helps:

Course of Study and Suggestions for Picture Studies by Carrie A. Van Gilder.

Carpenter Book I (Rand, McNally & Co.).

LANGUAGE

Second Grade

Four-fifths work oral.

A. Aims:

I. To develop ability in each pupil to construct orally simple stories of five or six related sentences.

II. To encourage children to talk freely on account of genuine interest.

III. To eradicate a few of noticeable errors in speech. Develop distinct articulation.

IV. 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, punctuation and careful, neat arrangement.

B. Technical Items:

I. Capitals:

a. At beginning sentence.

b. Names of persons, places, days of week, the months and word I.

II. Punctuations:

a. Period at end of sentence and after the abbreviations Mr. and Mrs.

b. Question mark at close of sentence that asks question.

C. Grade Poets:

I. Christina Rossetti (1830-1894):

a. Born and raised in London.

b. Two interests in life—poetry and religion.

c. Sister of Gabrill Rossetti.

II. Eugene Fields (1850-1895):

a. Wrote a great deal of poetry for children.

b. Born in St. Louis.

c. Beloved author and humorist.

d. Loved children and wrote especially for them.

e. Had talent.

III. Poems—Memorized:

Hiawatha ..... Longfellow
All Things Bright and Beautiful ..... C. F. Alexander
Wynkin, Blynkin, and Nod ..... Eugene Field
Good Children Street ..... Eugene Field
Who Has Seen the Wind ..... C. Rossetti
The Wind Has Such a Noisy Sound ..... C. Rossetti
How Many Seconds in an Hour ..... C. Rossetti
One, Two, Three ..... H. C. Bunner
(Selected Memory Gems)
Duty of Children ..... R. L. Stevenson
("Child Garden of Verse" Selected Memory Gems)
The Little Boy Blue ..... Eugene Field

D. Picture Study. Tell. Book II. Carpenter (Rand, McNally & Co.).

1. Sir Edwin Landseer ..... "Shoeing the Boy"
2. Sir Joshua Reynolds ..... "Angels Head"
3. Jean Francis Millet ..... "The First Step"

4. Madame Henriette Ronner.....“A Fascinating Tale”
5. Emile Renouf.....“A Helping Hand”

E. Stories Good for Reproduction—Dramatization:

1. The Little Jackal and the Alligator—“Stories to Tell Children”.....S. C. Bryant
2. Epaminondas—“Stories to Tell Children”.....———
3. The Elves and the Shoemaker—Mérril Second Reader .....Young and Field Reader
4. The Little Fir Tree—Stories to Tell Children..... .....Young and Field Second Reader
5. Billie Boy.....Elson Second Reader

F. Suggestive Reading List (Teacher):

(Children Retell Stories)

1. Little Black Sambo (R. & B. Co.).....Bonnerman
2. With Trumpet and Drum (Scribner).....Eugene Field
3. Indian Story of Je Shib (——— & Co.).....Jenks
4. Best Stories to Tell Children (H. M.).....Bryant
5. For the Children's Hour (Milton Bradley).....S. C. B.
6. Fairy Tales (Putman).....Joseph Jacob
7. Love Songs of Childhood (Scribner).....Eugene Field

G. Reading List for Children:

1. Hiawatha Primer .....Houghton
2. Jack the Giant Killer (Longmans).....Andrew Lang
3. Overall Boys (Rand).....E. O. Grover
4. Fairy Stories and Fables (Amer. Book Co.)..James Baldwin
5. Stories of Red Children (Educational).....Dorothy Brooks
6. Brownies—Their Book (Century).....Palmer Cox
7. Eugene Field Reader (Scribner).....Harris & Cooley
8. Robert L. Stevenson Reader (Scribner).....———

How Many Seconds in a Minute

How many seconds in a minute?
Sixty, and no more in it.

How many minutes in an hour?
Sixty for sun and shower.

How many hours in a day?
Twenty-four for work and play.

How many days in a week?
Seven both to hear and speak.

How many weeks in a month?
Four, as the swift moon runn'th.

How many months in a year?
Twelve the almanac makes clear.

How many years in an age?
One hundred, says the sage.

How many ages in time?
No one knows the rhyme.

C. Rossetti.

A Dutch Lullaby

Wynkin, Blynkin, and Nod one night
Sailed off in a wooden shoe—
Sailed on a river of crystal light,
Into a sea of dew.
"Where are you going and what do you wish?"
The old moon asked the three.
"We have come to fish for the herring fish
That live in the beautiful sea;
Nets of silver and gold have we!"
Said Wynkin,
Blynkin
And Nod.

The old moon laughed and sang a song,
As they rocked in the wooden shoe,
And the wind that sped them all night long,
Ruffled the waves of dew.
The little stars were the herring fish
That lives in that beautiful sea—
"Now cast your nets wherever you wish—
Never afraid are we;"
So cried the stars to the fishermen three:
Wynkin,
Blynkin
And Nod.

Wynkin and Blynkin are two little eyes,
And Nod is the little head,
And the wooden shoe that sailed the skies
Is a wee one's trundle-bed.
So shut your eyes while mother sings
Of wonderful sights that be
And you shall see the beautiful things
As you rock in the misty sea,
Where the old shoe rocked the fishermen three:
Wynkin,
Blynkin
And Nod.

All Things Beautiful

All things bright and beautiful,
All creatures great and small,
All things wise and wonderful—
The Lord God made them all.

Each little flower that opens,
Each little bird that sings—
He made their glowing colors,
He made their tiny wings.

The purple-headed mountain,
The river running by,
The morning and the sunset
That lighteth up the sky.

The tall trees in the greenwood,
The pleasant summer sun,
The ripe fruits in the garden—
He made them every one.

He gave us eyes to see them,
And lips, that we might tell
How great is God Almighty ,
Who had made all things well.

—Alexander.

LANGUAGE

Third Grade

The aim of Language in the third grade is to encourage pupils to talk freely on account of genuine interest, and to teach the technicalities of writing such as short sentences, paragraphing, good arrangement, and neatness.

Two poets, who are very adaptable to this grade are Longfellow and Whittier. Both are children's poets.

Poems from these two poets to be memorized will be found at the last.

Language is a drill subject from start to finish therefore too many drills can not be given.

Use of saw and seen:

Sentences.
Short oral stories.

Use of has, have:

Sentences.
Gámes.

Use of is and are:

Sentences.
Group work is always good.

Use of "It is I":

Different kinds of games will be most benefiicial in this correction.

Use of "I think not" instead of "I don't think":

Games.
Questions and answers.

Capitals:

Special drill on
Days of week.
Months.
Holidays.

How to close sentences.
How to begin sentences.
How and when to paragraph:
Indentation.

Abbreviations:

Most common

1. Days of week.
2. Months.
3. Mr. and Mrs.

Quotation marks should be mastered thoroughly in this grade as to their use and why used.

Punctuation Marks:

Period.
Comma.
Question Mark.
Quotation Mark.
Interrogation Point.
Colon. (Letters).

Demand correct usage of speech and correct writing in any phrase of work. If you do your language work is half done already. Very little written work is ever done in language in the third grade; oral about (4/5) four-fifths.

Memory work is of vast importance especially of children of this age to teach them to remember and to form mental pictures of what they have seen.

Fluent speaking and correct expression are the key notes of language in any grade.

Study Biography of Longfellow and Whittier.

Picture Study:

Below is an excellent list:

1. Shoeing the Bay Mare.....Landseer
2. The Sistine Madonna.....Raphael
3. Atlas .....Maxfield Parish
4. The Dance of the Nymphs or Little Fishers.....Murillo
5. Meadow .....Dupre
6. Distinguished Member of Humane Society.....Corot
7. Little Children of the Sea.....Landseer
8. Close of a Long Day.....Ortner
9. Knitting Shepherdess .....Stuart
   or George Washington.....Millet

Note—Good English Clubs in the third grade have been organized with great success. Having a President, Vice-President, Secretary and Treasurer; also Mrs. Good English.

All's Well

The clouds, which rise with thunder, slake
Our thirsty souls with rain;
The blow most dreaded falls to break
From off our limbs a chain
And wrongs of man to man but make
The love of God more plain.
As through the shadowy lens of even
The eye looks farthest into heaven
On gleams of star and depths of blue
The glaring sunshine never knew?

—By John Greenleaf Whittier.

The Pumpkin (1st Verse)

O, Greenly and fair in the lands of the sun,
The vines of the gourd and the rich melon run,
And the rock and the tree and the cottage enfold,
With broad leaves all greenness and blossoms all gold,
Like that which o'er Nineveh's prophet once grew,
While he waited to know that his warning was true,
And longed for the storm-cloud, and listened in vain
For the rush of the whirlwind and red fire-rain.

—By John Greenleaf Whittier.

The Barefoot Boy. (Stanza 1)

Blessings on thee, little man.
Barefoot boy, with cheeks of tan!
With thy turned-up pantaloons,
And thy merry whistled tunes;
With thy red lip, redder still
Kissed by strawberries on the hill;
With the sunshine on thy face.
Through thy torn brims jaunty grace;
From my heart I give thee joy—
I was once a barefoot boy!
Prince thou art—the grown-up man
Only is a republican.
Let the million-dollared ride!
Barefoot, trudging at his side.
Thou hast more than he can buy
In the reach of ear and eye—
Outward sunshine, inward joy.
Blessings on thee, barefoot boy!

—By John Greenleaf Whittier.

A Psalm of Life

Tell me not, in mournful numbers,
"Life is but an empty dream!"
For the soul is dead that slumbers,
And things are not what they seem.

Life is real! Life is earnest!
And the grave is not its goal;
"Dust thou art, to dust returnest,"
Was not spoken of the soul.

Not enjoyment, and not sorrow,
Is our destined end or way;
But to act, that each tomorrow
Finds us farther than today.

Art is long, and Time is fleeting
And our hearts though stout and brave
Still, like muffled drums, are beating
Funeral marches to the grave.

In the world's broad field of battle,
In the bivouac of Life,
Be not like dumb, driven cattle;
Be a hero in the strife!

Trust no Future, howe'er pleasant!
Let the dead Past bury its dead!
Act—act in the living Present!
Heart within, and God's o'erhead!

Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time.

Footprints, that perhaps another,
Sailing o'er life's solemn main,
A forlorn and shipwrecked brother,
Seeing, shall take heart again.

Let us, then, be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait.

—By Henry Wadsworth Longfellow.

Christmas Bells

I heard the bells on Christmas Day,
Their old, familiar carols play.
And wild and sweet
The words repeat
Of peace on earth, good-will to men!

And thought how, as the day had come,
The Belfries of all Christendom
Had rolled along
The unbroken song
Of peace on earth, good-will to men!

Till, ringing, singing on its way,
The world revolved from night to day,
A voice, a chime,
A chant sublime
Of peace on earth, good-will to men!
—By Henry Wadsworth Longfellow.

The Village Blacksmith

Under the spreading chestnut tree
The village smithy stands:
The smith, a mighty man is he,
With large and sinewy hands;
And the muscles of his brawny arms
Are strong as iron bands.

His hair is crisp, and black, and long,
His face is like the tan;
His brow is wet with honest sweat,
He earns whate'er he can,
And looks the whole world in the face,
For he owes not any man.

Week in, week out, from morn till night,
You can hear his bellows blow;
You can hear him swing his heavy sledge,
With measured beat and slow,
Like a sexton ringing the village bell,
When the evening sun is low.

And children coming home from school
Look in at the open door;
They love to see the flaming forge,
And hear the bellows roar,
And catch the burning sparks that fly
Like chaff from a threshing floor.

He goes on Sunday to the church,
And sits among his boys,
He hears the parson pray and preach,
He hears his daughter's voice
Singing in the village choir,
And makes his heart rejoice.

It sounds to him like her mother's voice,
Singing in Paradise!
He needs must think of her once more,
How in the grave she lies;
And with his hard, rough hand he wipes
A tear out of his eyes.

Toiling—rejoicing—sorrowing,
Onward through life he goes;
Each morning sees some task begun,
Each evening sees it close;
Something attempted, something done,
Has earned a nights repose.

Thanks, thanks to thee my worthy friend,
For the lesson thou hast taught!
Thus at the flaming forge of life
Our fortunes must be wrought;
Thus on its sounding anvil shaped
Each burning deed and thought.

—By Henry Wadsworth Longfellow.

Seasonal poems are also very commendable.

LANGUAGE

Fourth Grade

Aims

ORAL

1. To strengthen the "sentence sense", eliminate "and" and "so".
2. To secure good bearing before the class.
3. To continue to promote orderly talking.
4. To secure good articulation and good tone.
5. To correct, with moderation, common spoken errors.

WRITTEN

1. To strengthen the "sentence sense", in the short paragraph.
2. To give considerable practice in the writing of short, familiar letters.
3. To drill on the words commonly misspelled and on common grammatical errors.
4. To secure complete mastery of the few technicalities noted.
5. To insist on neatness and good arrangement in all written work.

Sources of Material:

Picture study.
Literature.
Composition.
Dictation.
Troublesome verbs.
Plurals.
Letter writing.
Punctuation.
Contractions.
Capitals.
Quotations.
Book reports.
Use of the dictionary.
Language games.
Dramatization.

Technicalities:

1. Arrangement:
   a. Parts of a Letter:
      One-inch margin at left of page.
      One-inch paragraph indention.
      Begin heading and complimentary close near middle of page.
      Begin signature a little to the right under complimentary close.
   Begin second and third lines of heading a little to the right of the line above.

Begin salutation one-inch from edge of paper.

b. Superscription of an envelope.

2. Language:

a. Capitals:

Heading, complimentary close, superscription of envelope.

First word of quotation.

b. Punctuation:

Marks used in heading and superscription.

Quotation marks.

Commas with direct quotation.

Apostrophe in plural possessives.

c. Abbreviations:

No.; R. R.; Jr.; Sr.; Co.; etc.

D. Contractions:

Isn't, wasn't, I've, wouldn't, couldn't and others in common use.

Second Half

Technicalities:

1. Language:

A. Capitals:

In titles of all sorts.

Words referring to the Deity.

B. Punctuation:

Comma after words yes and no, when used as part of a sentence.

Comma or commas with name of person addressed.

C. Abbreviations:

Gov., Gen., Capt., Lieut., Hon., and any others needed.

Corrective English

Drill upon the forms:

lend	lent	have lent
blow	blew	have blown
freeze	froze	have frozen
burst	burst	have burst
rise	rose	have risen
shake	shook	have shaken
drown	drowned	have drowned
go	went	have gone
shine	shone	have shone

Distinguish between

Learn and teach
Sit and set
Says and said
Well and good
To, too, and two.

Drill upon the following:

I wish, not I wisht
Different from, not different than
Somewhere, not someplace
Fired for threw
They are for there are
Git for get
How much for how many
Clim for climbed
Heared for heard
Are for our
Agin for again.

Drill upon the correction of the following:

Hadn't ought to
I have got
I got it off John
First off
Take a hold
This here and that there
Hain't got
Are youse
Last from
Larger'n, longer'n
I bought me a hat
My pen point is busted
I told him if I could go
I'll make him take one for
I'll let him take one
Me and him has got to go to church

Suggested Pictures for Study:

1. Madame Le Brun and Her Daughter.....Le Brun
2. Whistling Boy .....Eickemeyer
3. The Song of the Lark.....Breton
4. The Shepherdess and Sheep.....Lerolle
5. Maud Adams as Peter Pan.....Ivanosky
   or Lost Sheep.....Soord
6. Washington .....Stuart
   or Thorobreds .....Hardy
   or Calling the Ferryman.....Knight
7. Christ in the Temple.....Hofmann
8. Pony War Dance .....Remington
   or The Meadow.....Dupre
   or The Avenue.....Hobbema
9. Halt in Oasis.....Schreyer

One picture a month taught thoroughly is better than more.

Poems to be memorized (suggested).

Allingham, William: Fairies. (Book of famous verse). Houghton.

Browning, Robert: Year's at the Spring. (Poems you ought to know). Revell.

Dickinson, Emily: A Day. (R. L. S.). Houghton.

Field, Eugene: Blue Pigeon. (Poems). Scribner.

Jackson, H. H.: October. (Nature in Verse). Silver.

Key, F. S.: Star Spangled Banner. (Open Sesame). Ginn.

Lowell, J. R.: Fountain. (Open Sesame, V. I.) Ginn.

Miller, E. H.: Bluebird. (Posy Ring). Houghton.

Nesbit, Edith: Little Brown Brother. (R. L. S.). Houghton.

Rossetti, C. J.: There's Nothing Like the Rose. (Posy Ring). Houghton.

Browning, E. B.: Child's Thought of God. (Open Sesame, V. I.). Ginn.

Carman, Bliss: Daisies. (Home Book of Verse). Holt.

Loveman, Robert: April Rain. (Home Book of Verse). Holt.

Morse, James H.: Morning. (R. L. S.). Houghton.

Nesbit, W. D.: A Song of Our Flag. (R. L. S.). Houghton.

Shakespeare, William: Under the Greenwood Tree. (Open Sesame, V. I.). Ginn.

Tabb, J. B.: Fern Song. (Posy Ring). Houghton.

Tate, Nohum: While Shepherds Watched Their Flocks. (Open Sesame, V. I.). Ginn.

Wordsworth, William: To a Butterfly. (Listening Child). Macmillan.

Poems by Longfellow

Village Blacksmith	Rain in Summer
Children's Hour	Windmill
Arrow and the Song	Hiawatha's Sailing

Poems by Celia Thaxter

Sandpiper	Robin's Rain Song
Wild Geese	The Scarecrow
Spring	Nikolina
March	The Sparrows

It is well to teach two poems a month and more if possible.

Books Suggested for Reports.

Black Beauty	Sewell
Alice's Adventures in Wonderland	Carroll
Arabian Nights	Anonymous
Big People and Little People of Other Lands	Shaw
Aunt Martha's Cupboard	Kirby
Water Babies	Kingsley
In the Animal World	Serl
Anderson's Stories	Miffin
Legends of the Red Chicken	Pratt
Our Birds and Their Nestlings	Walker
Book of Nature Myths	Holbrook
Little Pilgrim's Progress	Burnett
Little People of Japan	Muller
Fifty Famous People	Baldwin
Uncle Remus and the Little Boy	Harris
The Tree Dwellers	Dopp
'Twas the Night Before Christmas	Moore
Old Mother West Wind	

Two books should be read every six weeks, out of school, and give the report on them.

LANGUAGE

Fifth Grade

Aims

ORAL

1. To make the oral English period one of real interest to the pupils.
2. To train the class to talk for a few minutes using good enunciation and a natural speaking tone.
3. To eliminate, through continuous and spirited drill, the errors of speech that are most prevalent.
4. To lead pupils to "stick to the point.

WRITTEN

1. To give pupils the power to write a short paragraph or letter made up of short, clean-cut sentences.
2. To drill on the words commonly misspelled and on common grammatical errors.
3. To secure complete mastery of the few technicalities noted.
4. To insist on neatness and good arrangement in all written work.

Sources of Material:

Picture study.
Literature.
Composition.
Troublesome verbs.
Life of authors.
Plurals.
Descriptions.
Troublesome words.
Book reports.
Letter writing.
Dramatization.

Technicalities:

1. Arrangement:
   An outline with topics and subtopics.
2. Language:
   A. Capitals:
      Religious denominations.
   B. Punctuation:
      Review:
      Underline the title of a book, magazine, or literary selection when it is included in a sentence or otherwise used within the body of any composition.
   C. Abbreviations:
      Sec., Treas., A. M., P. M., M. D., D. D., P. S., Prof., and others as needed.

3. Use of dictionary and reference books:
   A. Review of previous work with dictionary.
   B. Arrangement in alphabetic order of words having the first two or three letters alike.
   C. How to use an index.

Second Half Year

Technicalities:

1. Arrangement:
   Parts of a business letter.
2. Language:
   A. Capitals:
      Political parties.
   B. Punctuation:
      Colon after salutation of a business letter.
   C. Abbreviations:
      Any that are needed.
3. Dictionary drill continued.

Corrective English.

Drill upon these forms:

break	broke	have broken
choose	chose	have chosen
throw	threw	have thrown
hurt	hurt	have hurt

Drill upon the correct use of the following:
rather, not kind of, kindy, sort of.
beside, not side of.
would have gone, not would of gone.

Distinguish between
have and got
among and between
lay and lie
funny and strange
much and lots
their and there
guess and think
like and love
an and a
its and it's
bring for take

Drill upon the correct use of the following:

cupfuls and cupsful

real and very

elimination of now at the beginning of a sentence.

pronoun after than—"taller than I."

Suggested Pictures for Study.

1. Day's Decline.....Mauve
2. Madonna and Child.....Titian
   or Infant Samuel.....Reynolds
3. Peace Maker.....Ernest Blumenscheim
   or Fields at Mid-day.....Schmidt
4. Pilgrims Going to Church.....Houghton
5. The Angelus.....Millet
   or Queen Louise.....Richter
6. Shepherd and Flock.....Bonheur
7. Home of the Heron.....George Inness
   or Three Members of Temperance Society.....Herring
8. St. Anthony and Christ.....Murillo
   or Martha Washington.....Stuart
9. Close of Day.....Adan

One picture a month taught thoroughly is better than more.

Poems to be Memorized

Cunningham, Allan: Sea-Song (Golden Numbers). Houghton.

Hemans, F. D.: Landing of the Pilgrims. (Heroic Ballads). Ginn.

Holmes, O. W.: Old Ironside. (Golden Numbers). Houghton.

Jackson, H. H.: Down to Sleep. (Golden Numbers). Houghton.

Longfellow, H. W.: Builders. (Graded Memory Selections). Educational.

Milton, John: Evening in Paradise. (Golden Numbers). Houghton.

Preston, M. J.: First Thanksgiving Day. (Poems of American History). Houghton.

Southey, Robert: Night. (Golden Numbers). Houghton.

Howe, J. W.: Battle Hymn of the Republic. (Golden Numbers). Houghton.

Keats, John: Morning. (Poetry of the Season). Silver.

Kingsley, Charles: Housekeeper. (Golden Numbers). Houghton.

Longfellow, H. W.: Psalm of Life. (Poems). Houghton.

Shakespeare, William: Good Name in Man or Woman. (Open Sesame, V. I.) Ginn.

Sweets, S. M.: Blue Jay. (Posy Ring). McClure.
Tennyson, Alfred: Christmas. (Household Book of Poetry). Appleton.
Wordsworth, Williams: Written in March. (Analytical Elocution). American Book Co.

Poems by John Greenleaf Whittier:

Barefoot Boy
Barbara Frietchie
Corn Song
Valuation
Snow Bound (first five stanzas)
In School Days
Red Squirrel
Huskers

Poems by Robert Burns:

Sweet Afton
Bannockburn
To a Mountain Daisy
Auld Lang Syne

At least two poems a month should be taught and more if possible.

Suggest Books for Outside Reading.

King of the Golden River.....Ruskin
Old Greek Stories.....Baldwin
Little Lame Prince.....Mulock
King Arthur and His Knights.....Radford
Jackanapes.....Ewing
Alice's Visit to the Hawaiian Island.....Krout
Birds' Christmas Carol.....Wiggin
Swiss Family Robinson.....Wyss
Early Cave Man.....Dopp
Children of the Cold.....Schwatha
Squirrels and Other Fur Bearers.....Burroughs
Aunt Martha's Cupboard.....Kirby
Our Birds and Their Nestlings.....Walker
Rab and His Friends.....Brown
Little Nell.....Dickens
Legends of King Arthur.....Green
How the World is Fed.....Carpenter
Just So Stories.....Kipling
Indian Stories.....Newell

LANGUAGE

Sixth Grade

Aims

ORAL

1. To give such thought to the handling of the oral language period that it will cease to be either a terror or a bore to the pupils.
2. Still keeping in mind the short sentence as the safe unit in speech, to strive for easy transitions as a step toward fluency.
3. To insist and insist in every lesson of the day on clear enunciation and a natural speaking voice.
4. To continue to fight against common errors of speech.
5. To train children to handle a single phase of a subject and to stick to the point.

WRITTEN

1. To complete the work of establishing the sentence sense.
2. To develop the power to write a short paragraph with some attention to arrangement of ideas.
3. To write and send frequently short, familiar letters.
4. To drill on the words commonly misspelled and on common grammatical errors.
5. To secure complete mastery of the few technicalities noted.
6. To insist on neatness and a good arrangement in all written work.

Sources of Material:

- Picture study
- Composition
- Literature
- Troublesome verbs
- Life of authors
- Descriptions
- Dramatization
- Troublesome words
- Book reports
- Synonyms
- Plurals
- Letter writing
  - Friendly
  - Business
  - Invitations

Technicalities:

1. Arrangement
2. Language
   - A. Capitals
     - Review

B. Punctuation
The broken quotation
Review

C. Abbreviations
Any needed in connection with geography or arithmetic.
Those of common business usage: Messrs., C. O. D., O. K., f. o. b., etc., inst., ult., do.

3. Dictionary work:

A. Guide words at top of dictionary page.
B. The guide to pronounciation.
Diacritical key.

Corrective English:

Drill upon the forms

draw	have drawn	drew
eat	have eaten	ate

If I were
If he were

Drill upon
Kind of, instead of kind of a
That (or this) kind, not those (or these) kind
Back of, or behind, instead of in back of
Almost, instead of most
Have to, instead of half to
Must have, instead of must of

Distinguish between:
Stood and remained
In and into
Than and then
Empty and spill
Like and as
Borrow and lend
Let and leave

Drill upon the correct forms of the following:
Alongside for beside
Elevated up for elevated

Drill upon the correct forms of the following:
Misplacing of only

Beginning a sentence with why
I would of known
He did not go yet

Formal Grammar:

First Half:

1. Sentence:
   A. Distinguished from a collection of words.
   B. Kinds:
      Declarative.
      Interrogative.
      Exclamatory.
      Imperative.
   C. The essential parts of the sentence.
      Subject.
      Predicate.
   D. Pick out complete subject and complete predicate and simple subject and simple predicate.
   E. Drill in the analysis of sentences.
2. The Noun:
   A. Common.
   B. Proper.
3. Uses of the Noun:
   A. Simple subject.
   B. Direct address.
      Note: Emphasize the fact that the noun in direct address is independent and not a part of either subject or predicate.
4. The Pronouns and its Antecedent.
5. Verb and the Verb Phrase.

Second Half:

1. Adjective.
2. Adverb.
3. Prepositional Phrase:
   A. An adjective.
   B. An adverbial.
4. Conjunction taught in connection with
   A. Compound subject.
   B. Compound predicate.
5. Interjection.
6. Analysis sentences.
7. Build sentences.

Suggested Pictures for Study.

1. Brittany Sheep.....Bonheur
2. Spirit of '76.....Willard
3. Madonna and Child.....Bodenhausen
4. The Gleaners.....Millet
5. "All's Well".....Winslow
   or End of Day.....Adan
6. Christ and the Rich Young Ruler.....Hofmann
7. Sunbeams .....Kurzwelly
8. The Monarch of the Glen.....Landseer
9. Lincoln .....Cobb

It is better to study one picture a month and study it well than more.

Poems to be Memorized and Studied—De Lisle, Roger.

Translation of the Marseillaise (Open Sesame, V. 20). Ginn.
Emerson, R. W.: Concord Hymn (Golden Numbers). Houghton.
Hunt, Leigh: Abou Ben Adhem (Open Sesame V. 1). Ginn.
Riley, J. W.: Boy Patriot (Book of Joyous Children). Scribner.
Sangster, M. E.: Our Flag (R. L. S.). Houghton.
Shakespeare, William: Orpheus with His Lute (Golden Numbers). Houghton.
Stevenson, R. L.: At Morning (Recitations for Assembly and Classroom). Macmillan.
Tennyson, Alfred: Throstle (Song of Nature). McClure.
Van Dyke, Henry: "America for Me". Various Collections.
Aldrich, T. B.: Before the Rain (Golden Numbers). Houghton.
Anon.: Dare to Do Right (R. L. S.). Houghton.
Bennett, H. H.: Flag Goes By (Golden Numbers). Houghton.
Bryant, W. C.: To a Fringed Gentian (Poems). Various Editions.
Bryant, W. C.: Yellow Violet (Poems). Various Editions.
Byron, Lord: Destruction of Sennacherib (Golden Numbers). Houghton.
Cary, Alice: Work (Nature in Verse). Silver.
Finch, F. M.: Blue and the Gray (Poems of American Patriotism). Page.
Longfellow, H. W.: Excelsior (Poems). Houghton.
Wootton, Henry: Lord of Himself (Lyra Heroica). Scribner.

Poems from Rudyard Kipling.

Children's Song from Puck of Pook's Hill.
If.

Together
L'Envoi, "When Earth's Last Picture is Painted."
Law of the Jungle.
Roll Down to Rio.
White Man's Burden.

Poems from Sir Walter Scott.

Hie Away from Waverly.
Soldier Rest (from the Lady of the Lake).
Lochinvar (from Marmion).
Jack o' Hazeldean.
Spindle Song (from Guy Mannering).
Waken Lords and Ladies Gay.
Christmas in England (from Marmion).
Parting of Douglas and Marmion.

At least two poems a month should be studied and memorized and more if possible.

Suggested Books for Outside Reading.

Two books should be read and reports given every six weeks.

Jungle Book.....Kipling
Merry Adventures of Robin Hood.....Pyle
Wonder Book.....Hawthorne
Uncle Remus and His Friends.....Harris
Heidi.....Spiri
Tanglewood Tales.....Hawthorne
American Heroes of History.....McFee
Dog of Flanders.....Ramee
Geographical Readers.....Guyot
Stories of Industry.....Chase
Birds Every Child Should Know.....Blanchen
How We Are Clothed, Fed, Sheltered, and How We Travel.....Chamberlain
Little Colonel.....Johnston
Beautiful Joe.....Saunders
Legends of King Arthur.....Greene
Knocking Around the Rockies.....Ingersoll
Land of the Blue Flower.....Burnett
Insect Stories.....Kellog
Indians and Pioneers.....Hazard and Dutton
True Story of Abraham Lincoln.....Brooks
Boys' Stories.....Kipling

OUTLINE

OF

READING

READING

Introduction: Through reading, much of the life experience of every individual is gained. The more one reads, the richer and larger that experience will be. Reading is a pleasurable and profitable means of occupying one's leisure; it stimulates the imagination; it is the means of securing the facts needed to carry on more successfully life's work.

In order to perform this amount of reading the pupil must be trained to recognize the symbols with speed and accuracy, to comprehend the meaning of those symbols, and to evaluate and interpret the knowledge gained. This training is the work of the school.

Primary Grades—I, II, III

Reading Objectives in the Primary Grades: The specific purpose of reading instruction in the primary grades is to develop desirable attitudes and economical and effective habits and skills. The accomplishment of this purpose includes:

I. The ready recognition of words and phrases.

II. The association of meaning with these words and phrases so that they may stand for concrete ideas, not mere abstractions.

III. The ability, through these concrete ideas, to get the thought from the printed page.

IV. The ability to master new words through the use of pictures, context, and phonetics.

V. The ability to pronounce clearly and fluently.

VI. The interpretation of mechanical aids—capitals, punctuation marks.

VII. The ability to recognize and to read as units thought phrases as—the house/ on the hill/ is white.

VIII. The habit of reading silently before any attempt is made to read aloud.

IX. The lengthening of the eye span. (When the eye covers a larger number of words the thought phrases are more easily recognized and the reading is smoother).

X. The cultivation of pleasing tones.

XI. The formation of a correct habit of standing.

XII. Instruction concerning the care and use of books.

Methods in Primary Reading: The sentence or thought-getting method is best suited to the needs of the child in his first attempts at reading. The *whole* thought carries interest, and

meaning is thus attached to the words. Phrases, words, and phonics follow. All methods are interdependent and there should be a constant moving back and forth among them.

Three to five weeks of pre-primer work should be given. The purpose of this work is to interest the child in reading and to give him some means of attacking the text when it is placed in his hands; hence this work must be based on the text that is to follow. If three weeks of pre-primer work are to be given, base it upon the three weeks of work that will be done in the primer. The vocabulary and the subject matter will then be familiar enough to enable the child to begin his work with less discouragement. Pictures, nursery rhymes, action sentences and games, and stories form the basis for the first instruction. A "price and sign maker" or a box of two such types, will enable the teacher to make printed labels for attractive pictures. *Always* use the article with the noun and both with and without the capital as "An apple, an apple."

Action words may be given and later developed into sentences as "Run—Run to the window." Each child is to follow the directions given him. This may be made a sort of game that will develop speed and interest. Nursery rhymes offer very satisfactory material for pre-primer work when they are included in the primer. Many of them are already familiar to the children and the rhythm makes learning easy. The rhyme may be acted in many cases and finally read from the board.

As an immediate preparation for the primer the pupils should be made familiar with the first stories. The number of recitations needed for each story will vary with the amount of time that is given daily to primary reading, but five steps should be followed:

I. The story is told by the teacher. Interest must be aroused and the *exact words of the book must be used.*

II. The story is retold by the pupils and plans are made for dramatization.

III. The story is played by the pupils. This may be repeated several times with the pupils taking new parts. The pupils should criticize their own work.

IV. The story is placed on the blackboard and read by the children.

V. The story is then read from the book.

New words should be presented just before they are actually needed. The child must get a clear idea of the meaning of the

word and a definite impression of its appearance and sound. Too many words at a time lead to confusion. Vocabulary building is a slow but a continuous process. Present the word in as many ways as possible—use pictures, flash cards, write the word on the board, but let the child find the word in the text and say it aloud. The difficult words are those to which no meaning can be attached as prepositions and articles. Give these in connection with other words that are already familiar.

Oral Reading: Oral reading is *not* a thought-getting process. It is thought-giving; it is a social activity that should be cultivated but it must not be made the sole basis of judging the ability of the pupil to read. Real ability to read is evinced through comprehension of the thought of the printed page.

But the child at the beginning of the first grade cannot take the usual reading tests, so oral reading becomes the most convenient form of testing his ability to recognize words and to get the thought. It is also true that the *pronounced* word will more readily become a part of the active vocabulary than the word that is merely *thought.* Hence oral reading will occupy a large part of the time in the primary grades. This amount will be decreased as subjects requiring reading are added until the proportion which in the lower grades is approximately 80% oral and 20% silent becomes in the upper grades 20% oral and 80% silent.

In oral reading consideration must be given to the audience situation. Whether the reader stands before the group to read or sits in his seat, the rest of the group should be listeners. Books should be closed. By this means each has a responsibility. The reader must present the material in a way to hold the attention and to *convey the thought.* He must make himself worth listening to. The listeners must get the thought by hearing what is read—a function every individual must perform every day of his life. To get the best results each child should select and prepare some material not familiar to the others.

Silent Reading: While much oral reading is done in the primary grades, it is now recognized that silent reading is the normal activity. It is the kind of reading that is done by the pupil throughout his school life and is practically the only form of reading that is done by the average adult. Training for silent reading should begin in the first grade.

The chief values of silent reading are:

I. *Increased speed*—the rate of oral reading can be no greater

than vocalization will permit. Silent reading is not restricted in this way, hence the process is more rapid.

II. *Greater comprehension*—in silent reading the attention is given to the *meaning* of the symbol rather than to the pronunciation and enunciation which is necessary in oral reading.

The tests show that speed and comprehension are closely related. Larger units are grasped and these are better organized. This makes for greater accuracy.

The material for silent reading must be new else there will be no incentive for reading, but the vocabulary should not be too difficult for the grade. The subject matter should be interesting, well presented, and, for the primary grades, well illustrated. Narrative material comes first and may be followed by factual material dealing with nature and animals. Select material which is written as a narrative when possible as this carries a double interest.

Silent reading may be tested by oral reproduction, by questions and discussion, by dramatization if several have read the same material, or the pupil may perform an action or carry out instructions to show correct interpretation of the silent reading.

Phonics: Phonics is a device to assist the child in the mastery of new words, to sharpen auditory perception, and to develop speech co-ordination.

When the daily program permits, phonics should be taught systematically in a period apart from the reading lesson, and the application made in the reading period. The manuals which accompany the different series of readers present in detail the phonic elements which are needed in the vocabulary of the reader. *Use the Manual.*

When work in phonics should begin depends on the reading methods used, but in most cases it should not begin earlier than the second half of the first school year. At no time should undue emphasis be placed on phonics, for this tends to center the attention on the single letter or small groups of letters and thus shortens the eye span. Stressing the mechanics of the word also diverts the attention from the meaning of the word and lowers the comprehension.

Dramatization: Dramatization is a normal outlet for child activity. "Let's play like" is frequently heard in a group of children left to entertain themselves. The teacher who fails to make use of this play spirit loses an opportunity to stimulate the

imagination, to make vivid the vicarious experiences which the child has gained through reading, and to give a real motive for *rapid* reading to find what material can be used and for *careful* reading to get the facts regarding setting, costumes, characters, and conversation. Expressive oral reading comes more easily when the child is acting the part, not merely reading from a book. Dramatization is also one of the best means of testing comprehension and appreciation of silent reading.

All work in dramatics must be spontaneous as far as the children are concerned. The teacher is there to help with problems that are too difficult for the children to handle, but not to direct. The best criticisms will come from the children themselves. Any effort to get a "finished" production is apt to check the initiative of the group.

When children are timid, the first work may be merely that of performing a single act. A set of directions may be prepared on cards and exposed one at a time or they may be put on the board in inverse order and covered by a roller shade that is raised as each act is completed. As the children become familiar with longer stories, more pretentious efforts may be made.

Dramatization does not belong to the primary grades only. It is valuable throughout the school. In the intermediate and upper grades it may be correlated with other subjects. History may furnish the story that will be written in the composition class, and played during the regular reading period.

Use of Poetry. Memory Work

Poetry is one of the arts and, like all the arts, in order to enjoy it fully, there must be training in appreciation. This appreciation must first be felt by the teacher herself or no successful teaching of poetry can be done. The most beautiful poem will be ruined by a mechanical, unsympathetic presentation.

Lyric poetry makes its first appeal to the ear, hence it must be presented orally. Every teacher of reading and literature should be able *to read* and *to interpret* well and should do it frequently. It was never intended that poetry should be read as prose else it would have been so written. *Keep the rhythm and the rhyme.* This is one of the chief attractions of poetry and it will be lost if the child is constantly admonished, "Don't sing it."

The literary and technical aspects of poetry are of minor importance for elementary and high school pupils. Poetry suitable

for the grades should give an emotional, not an intellectual experience and this emotion as such should not be discussed. Talk about the background of the poem, what it says and why, but let the child make his own application if there is one to be made. Much poetry has been written for pure enjoyment—read it for the same purpose. There is no moral teaching to be found in Stevenson's poem "The Swing" but there is much pleasure for young and old.

Memorizing: Much of the unpopularity of poetry can be traced to the assignment of memory work. The material selected usually meets the approval of the teacher but has little interest for the child. The task becomes a punishment and antagonistic attitudes follow. However, memory work has its value and its place. Words learned in a definite relation to other words more readily become a part of the active vocabulary. Memorized material is best for training in expressive reading for the mind is no longer fully occupied recognizing symbols. The bits of description and attractive phrases that stay in the mind are always a source of pleasure and will, through unconscious imitation, tend to improve one's style of speech and writing.

A poem assigned for memory work must first be read as a whole by the teacher. If it is well read a pleasant, vivid impression will result and the child's interest will be engaged. Pictures and biography may be used, and the poem should be related to the child's experiences. Difficult words and phrases should be made clear and the children may find expressions and descriptions that please them. By this time the poem is quite familiar and a second reading by the teacher or by one of the better readers among the pupils will serve to fix the idea. Memorizing will now be a simple task.

If the poem is too long to be learned as a whole, each section learned must be connected with what precedes and follows so there will be a unit when the work is completed.

Memory work is not necessarily confined to poetry but it is more suited to the work than prose, especially in the lower grades. No list of poems for memorizing should be accepted as the one suitable for every school. Recommend some poems and let the children select their own. In the Supplementary Reading list on page 57 will be a few poems that are generally accepted as meeting the needs of children, or for some special occasion.

Standards of Achievement: The pupil should not take up the First Reader until he has definitely acquired such skill as makes it possible for him to attack the work with success. He should know.

1. At least twenty of the word group cards made from phrases of the text as: The little red hen. Once upon a time.
2. At least seventy-five of the word or flash cards.
3. Should have read at least three primers.

First Grade—At the end of the first grade the children should be able to read with a fair degree of independence the primers, first readers, and supplementary material of equal difficulty. The average pupil should have a reading vocabulary of 400 words and should have read at least two first readers. Standard tests may also be given. Those suitable for the primary grades are Haggerty Reading Examination Sigma I, World Book Co., Yonkers-on-Hudson, N. Y., or the Gray Standardized Reading Paragraphs and Oral Reading Check Test, Set I, Public School Publishing Co., Bloomington, Ill.

Second Grade—The pupil should have a rapidly growing vocabulary; through the use of phonics he should be able to pronounce new words independently; and he should have read at least four books of second grade difficulty. The Haggerty Test, the Gray Test, Set II, and the Stanford Achievement Test; Reading Examination, World Book Co., Yonkers-on-Hudson, N. Y., are standard tests appropriate for the second grade.

Third Grade—This grade closes the work that is of a primary nature. Several additional textbooks will be placed in the pupil's hands in the fourth grade. His success or failure will depend on his reading ability, therefore standards of accomplishment should be held rather closely. The tests given for the second grade are also to be used for the third grade.

Intermediate Grades—IV, V, VI

Objectives—Reading which has been a function in itself now becomes a means of acquiring information in other subjects, as history, geography, nature, etc.

But reading should not be confined to textbooks. There should be such an abundance of interesting material that the desire to read will be stimulated. Experience should be broadened through extensive silent reading.

Instruction should aim:

1. To teach genuine habits of study.
2. To increase the active vocabulary through oral discussion.
3. To develop an increasing delight in the reading of good literature which will lead to voluntary reading of worthwhile books at home and in the library.
4. To establish ideals of conduct.

Method—In the primary grades there has been a large proportion of oral reading. The amount in the intermediate grades is about 50 per cent oral and 50 per cent silent. The devices of the third grade should not be abruptly discontinued. The pupil will need some help in adjusting himself to the difficulties met in the new textbooks. An increasing amount of information must be gathered from the printed page and the pupil must be trained to select and organize the important facts. Habits of concentration, observation, reflection, and judgment should be acquired and the selections should be chosen for some such definite purpose and not merely as a reading exercise. The development of a sense of appreciation for beauty must not be lost sight of in this effort to train for thought-getting. Every rural community has in it some element of beauty that may be overlooked through familiarity. Train the pupil *for* not *away from* his environment.

Standards of Achievement: In the intermediate grades reading is no longer the chief basis for promotion, but the score made on any standard test should be satisfactory. The pupil should also be able to study independently; to use reference books, especially the dictionary; and to read and follow directions. In addition he should have read from six to twelve books from the library.

A study of children's reading was made at Winnetka, Illinois, under the auspices of the American Library Association. Some of the preferred titles, arranged according to the grades, follow. Those starred are books that a large number of experts agreed have real literary merit. Your local bookseller or the Herrick Bookstore in Denver will be able to furnish information concerning publishers and prices, or will order the books for you.

Third Grade List.

Smith—Eskimo Stories.
Morcomb—Red Feather.
Blaisdell—Cherry Tree Children.
Dietz—Good Times on the Farm.

Blaisdell—Twilight Town.
Smythe—Reynard the Fox.
Blaisdell—Tommy Tinker's Book.
Adams—Five Little Friends.
Brooks—Stories of the Red Children.
Serl and Evans—Work-a-Day Doing on the Farm.
Rice—Lost Monkey.
LaRue—Under the Story Tree.
Craik—So-Fat and Mew-Mew.

Fourth Grade List.

Perkins—Dutch Twins.
*Grimm—Grimm's Fairy Tales.
*Stevenson—Child's Garden of Verses.
Williston—Japanese Fairy Tales.
Burgess—Old Mother West Wind.
Hunt—About Harriet.
Pumphrey—Pilgrim Stories.
*Bannerman—Little Black Sambo.
Barrie—Peter Pan.
Lucia—Peter and Polly in Autumn.
Carpenter—Around the World with the Children.
Dopp—Early Cavemen.
Lofting—Story of Mrs. Tubbs.
*MacDonald—At the Back of the North Wind.
Lucia—Peter and Polly in Spring.
Lucia—Peter and Polly in Winter.
Lang—Jack the Giant Killer.
Dopp—Tree Dwellers.
*Potter—Tale of Peter Rabbit.
Bigham—Mother Goose Village.
Bigham—Merry Animal Tales.
Lang—Cinderella.
Chance—Little Folks of Many Lands.
Eggleston—Stories of Great Americans.
Lang—Little Red Riding Hood.
Grover—Overall Boys.
Defoe—Robinson Crusoe.
Shillig—Four Wonders.
Blaisdell—Polly and Dolly.

Fifth Grade List.

Sewell—Black Beauty.
*Collodi—Pinocchio.
*Lofting—Story of Dr. Dolittle.
*Mulock-Craik—Little Lame Prince.
*Anderson's Fairy Tales.
*Carroll—Alice in Wonderland.
Perkins—Japanese Twins.
Perkins—French Twins.
Baldwin—Fifty Famous Stories.
Perkins—Belgian Twins.
*Ruskin—King of the Golden River.
*Thorne-Thomsen—East o' the Sun and West o' the Moon.
Perkins—Eskimo Twins.
*MacDonald—Princess and the Goblin.
Perkins—Irish Twins.
Kipling—Just-so Stories.
Perkins—Cave Twins.
Perkins—Swiss Twins.
*Mulock-Craik—Adventures of a Brownie.
Hall—Viking Tales.
Brown—Lonesomest Doll.
Warren—King Arthur and His Knights.
Perkins—Puritan Twins.
Spyri—Moni the Goat Boy.
Perkins—Mexican Twins.
Burgess—Mother West Wind's Children.
Cobb—Clematis.
*Barrie—Peter Pan and Wendy.
Phillips—Wee Ann.

Sixth Grade List.

*Spyri—Heidi.
Otis—Toby Tyler.
*Defoe—Robinson Crusoe.
Saunders—Beautiful Joe.
Sidney—Five Little Peppers and How They Grew.
Haskell—Katrinka.
Maeterlinck—Blue Bird for Children.
Wiggin—Birds' Christmas Carol.
Lofting—Voyages of Dr. Dolittle.
Ouida—Dog of Flanders.

*Kipling—Jungle Book.
Perkins—Scotch Twins.
*Lang—Blue Fairy Book.
Lofting—Doctor Dolittle's Circus.
Lofting—Doctor Dolittle's Postoffice.
*Pyle—Some Merry Adventures of Robin Hood.
Lang—Green Fairy Book.
Perkins—Spartan Twins.
Perkins—Italian Twins.
*Kingsley—Water Babies.
Otis—Mr. Stubb's Brother.
Lang—Red Fairy Book.
Brown—John of the Woods.
Drummond—Monkey that Would not Kill.
Pyle—Nancy Rutledge.
Lang—Yellow Fairy Book.
*Pyle—King Arthur and His Knights.
Hale—Peterkin Papers.
*Irving—Rip Van Winkle.

Supplementary Texts

Grade I.

Bolenius—Primer, First Reader. Houghton Miffin Co.
Winston—Primer, First Reader. The John C. Winston Co.
Winston—Companion Readers, Primer and First Reader.
Baker and Thorndike—Everyday Classics Primer, First Reader. Macmillan.
Horace Mann—Primer and First Reader.
Fru and Treadwell—Primer and First Reader. Rowe-Peterson.
Aldine Readers—Primer and First Reader.
Lewis and Roland—Silent Readers. The John C. Winston Co.

Grade II.

Bolenius—Second Reader. Houghton Mifflin Co.
Winston—Second Reader. The John C. Winston Co.
Progressive Second Reader. Silver Burdett and Co.
Story Hour—Second Reader. American Book Co.
Elson—Second Reader. Scott, Foresman and Co.
Stone—Silent Reader, First Grade.
Holton Curry Readers, Second Grade. Rand McNally & Co.

Grade III.

Bolenius—Third Reader. Houghton Mifflin Co.
Baker and Thorndike—Everyday Classics, Third Reader. Macmillan.
Kendall—Third Reader. D. C. Heath and Co.
Holton—Curry Third Reader. Rand McNally.
Field Reader, Third. Ginn and Company.
Winston—Third Reader. The John C. Winston Co.

Helpful References for Teachers

Bryant—How to Tell Stories to Children. Houghton Mifflin.
Bryant—Stories to Tell to Children. Houghton Mifflin.
Curry and Clippinger—Children's Literature (Collection). Rand McNally.
Gray—Remedial Cases in Reading. Diagnosis and Treatment. Chicago University.
How to Organize a Library. Library Bureau, Philadelphia, Pa. Free.
Huey—The Psychology and Pedagogy of Reading. Macmillan.
Nixon—Fairy Tales of a Child and Act.
Stevenson—A Child's Garden of Verses. Scribner.
Stewart—Tell Me a Story.
Uhl—The Materials of Reading.
Twenty-fourth Yearbook of the Society for the Study of Education: Part I. Report of the National Committee on Reading. Public School Publishing Co., Bloomington, Illinois.
Eighteenth Yearbook—Gray: Principles of Method in Teaching Reading.
Sixteenth Yearbook, Part I—Gray: Silent Reading.

OUTLINE

OF

SPELLING

SPELLING

The recent revival in the study of spelling is a direct result of the dissatisfaction very generally expressed as to the present achievements of children in that line of educational work. While it is true that there are differences of opinion on this question, some contending—and basing their contention upon a survey made of some spelling tests given about eighty years ago—that the children of today spell markedly better than those of the earlier period, and others insisting that Twentieth Century children are decidedly deficient in this respect, yet one can be certain the increased attention given to this subject and the improved methods now so easily accessible, should give us, in the very near future, a race of accurate and rapid spellers.

Some of the leading authorities on the study of spelling make the following suggestions:

1. A minimum course which will omit the dictionary studies and the supplementary word sections.

2. A middle course which will include the dictionary studies, but omit the supplementary word sections.

3. A maximum course which will include both the dictionary studies and the supplementary word sections.

Others suggest that:

1. The teachers keep a list of the most troublesome words and give frequent review lessons on these words.

2. Some form of competition is suggested for general reviews, such as spelling games, team contests, etc., with records kept of results.

3. The teacher should strive to develop a spelling consciousness. Lists of enemy words, viz.: "Words that are most frequently misspelled," should be made. Also, the child should always verify the spelling of a doubtful word. Never permit guessing.

4. All pupils should visualize, listen, pronounce and write. With younger children an auditory method of drill is helpful, and with older children a visual method should be often employed, but the teacher should never confine herself solely to one method.

5. Teach short groups of words in their natural relations.

Points that should be stressed as of greater importance than any others, are:

1. Tests of the pupils should be given before they begin to study.

2. Each pupil should study only the words he misspelled on the test.

3. He must be taught an economical method of study.

4. He must see clearly what progress he is making.

The modern revival of interest in the study of spelling has resulted in the production of a very large number of excellent spelling books which contain definite outlines for spelling instruction. These books are reasonable in price and easily accessible, and teachers and school children of today are to be congratulated upon the richness of spelling material from which they may draw.

OUTLINE

OF

HANDWRITING

HANDWRITING

I. Objectives:

1. Legibility and speed—one as important as the other:
   - A. Speed has a direct influence on quality, and quality on speed.
   - B. There should be a definite effort toward rapid writing, with the maintenance of a reasonable legibility.
   - C. Graphic speed is symptometric of general bodily speed of movement.
   - D. If a child writes rapidly enough to keep the mechanical process from retarding or interfering seriously with his thoughts, he has attained a satisfactory rate of speed.
   - E. It should be remembered that a young child has less control of his movements than an older child has. Therefore he should not be expected to develop so great a speed nor so high a degree of accuracy as is required of an older child.
     - a. The most prominent aim in the young child's mind should be good letter forms.

2. Final standards:
   - A. As governed by the demands of after life for general use and for vocational use:
     - a. A quality for approximately 60 on the Ayers Scale or equivalent standards on similar scales.
     - b. A speed of approximately 70 on the Ayers Scale or similar scales.
   - B. Pupils attaining these standards by the end of the sixth grade should be excused from the writing class while those shown by the scale to be poor writers should be kept in class and their efforts directed toward remedying the defects shown by comparing their writing with the Freeman Diagnostic Scale, the Gray Score Card, or similar scales.

II. Movement:

1. Combined movement of arm and fingers:
   - A. Conditions outside the schoolroom are not favorable for complete arm movement.
   - B. If too difficult or artificial type of movement is taught, the child will not use it in all his writing, and it therefore does not become automatic.

2. The movements of the pen should be organized into a series of units. A unit is usually a double stroke, upward and downward, or downward and upward. One count to each unit.
3. The practice of formal drills does not carry over satisfactorily to the writing of letters, therefore the counting should be done while letters are being written.

III. Position:

1. Of body:
   A. Squarely facing the desk or table.
   B. Both feet on the floor.
   C. Arms resting easily on the desk with elbows projecting off the desk, but not supporting much of the weight of the body.
2. Of paper:
   A. Directly in front of the writer.
   B. At a tilt of thirty degrees so that the downward strokes will make an angle of sixty degrees with the base line.
3. Of hand holding the pen:
   A. Palm turned down until wrist is almost level.
   B. Fingers slide upon the nails or upon the first joint of the little finger.
4. Of the pen:
   A. First finger nearer the point of the pen than the thumb is.
   B. Held easily.
   C. Adjust to individual differences as the proportion and structure of the hands of people differ. Modes of activity differ. Therefore there must be individual variations allowed in position and manner of holding the pen.

IV. Style of writing:

1. Medium slant.
2. No flourishes.
3. Each pupil should be encouraged to develop a characteristic style as a part of his personality.

V. Length of time for writing period:

1. Ten or fifteen minutes according to the grade to be taught.

VI. General directions:

1. Decrease the size of the writing from first grade to sixth grade, but increase the speed and raise the requirements for quality.
2. Adapt the materials to the maturity and skill of the class.
3. In the exercises of each grade, use the vocabulary common to the children of that grade.
4. Introduce new letters and combinations more slowly in the lower grades than in the higher.
5. Correlate handwriting with other subjects. In order to make sure that the skill attained in the writing period carries over to the other subjects, grade the writing done in other subjects.
6. Develop rhythm of movement adapted to the individual letter forms by writing to count adjusted to the makeup of the letters and words. Be sure to make the count used in a grade agree with the speed of writing in that grade. In order to show the rhythm, write the exercise on the board and count as you do it.
7. Motivate the penmanship lessons:
   A. Charts and graphs showing individual and class progress are aids in motivation.
   B. Use devices suited to the grade.
8. Have an aim for each grade.
9. Make a study of each child.
10. Develop self-criticism by requiring the child to compare different specimens of his own handwriting first, and then to compare specimens with the scale.
11. To get the general standing of the class and the distribution of ratings with regard to quality and speed, use Ayers Gettysburg Scale or similar scales. Specimens shown to be very poor in quality should be further tested by means of the Freeman Diagnostic Scale, the Gray Score Card or similar scales in order to discover particular defects.
12. A study of such helps as the Courtis Standard Practice Tests in Handwriting will give valuable suggestions for

the needed practice indicated by the use of the diagnostic scale.

13. Handwriting is a tool for the expression of ideas and not an end in itself. "To train children to produce a quality of handwriting much above practical requirements, or a quality which can not be maintained in every day life, is a waste of effort and a form of overtraining."

First Grade

I. Objectives:

1. To develop motor control:
   A. Co-ordinated movements.
   B. A speed of twenty words a minute.
   C. Reasonably standard habits of position.
2. To develop ability to reproduce all the digits and most of the capitals and small letters.
3. To develop ability to write independently a number of monosyllabic words of his reading vocabulary.

II. Materials:

1. Large size, soft pencils.
2. Dull-finish wrapping paper.
   A. If ruled, the spaces between the lines should be one inch.
3. Plenty of blackboard space within easy reach of a child standing naturally.

III. Content and method:

1. Give as much work as possible on the board. See to it that children stand on *both feet* about a foot from the board, and be sure that no child rests one hand on the chalk trough while writing with the other hand.
2. When using pencil and paper, require the position described in the general directions, but adapt it to individual differences.
3. Use one short period per day. Do not let the children become fatigued.
4. To teach children to acquire the medium slant, divide the board or the paper into vertical spaces by means of lines having a medium slant. Then require the children to make the letters written in these spaces the same slant as the boundary lines.

5. Motivate the work:
   A. An effective device to teach slant is to use short broken lines imitating falling rain. Ask the children to imagine that numerals and letters are coming down with the rain and require them to write the numerals and letters among the broken lines and with the same slant.
   B. The few times that the formal drill upon the direct oval is helpful, as in making preparations for writing such capitals as "O" and "C," a few short undercurves will transform the uninteresting oval into "Humpty-Dumpty."
6. The small letters should be three-eighths inch in height.
7. A standard means but little to a first-grade child. If an easy rhythmical movement is attained, crude forms of letters and figures may be accepted.

IV. Requirements by months:
1. First month:
   A. Horizontal curves, upper and under, swinging clear across the page to develop sideward movement.
   B. The digits, 1, 2, 3, 4, 5:
      a. Correlate with learning to count to five.
2. Second month:
   A. Review the swing exercises across the page, shortening to a half and then to a third of the distance across the page.
   B. Exercises consisting of each of these letters joined by long swinging strokes: a, o, c, b, d, w. Then use combinations of these letters and those learned last month.
   C. The digits, 6, 7, 8, 9, and the number 10.
3. Third month:
   A. In the manner already described, introduce f, m, n, g.
   B. Introduce capital A. Call attention to beginning the count on the down stroke.
   C. Make capital E.
   D. Make phrases out of the words learned.
4. Fourth month:
   A. Introduce practice on the right curve and the direct oval. Try to "carry over" this practice to the making of capitals C and O.

B. Make s, h, p, y.
C. Practice on new phrases made from all the letters studied.

5. Fifth month:
   A. Make v, x, r, k.
   B. Make capitals, B, I, M, N. U, V, W, Y, J, R, P.
   C. Keep up review and phrase work.

6. Sixth month (Emphasize letter formation):
   A. Make capitals F, T, H, K, L, D, G, S.
   B. Use familiar rhymes for lesson practice.

7. Seventh month (Emphasize spacing, alignment, and quality of line):
   A. Short sentences composed of words already learned from reading lessons.
   B. Sentences taken from poems the children are learning.
   C. In practicing new words, call attention to familiar points.
   D. Considerable practice in writing own names.

8. Eighth month:
   A. Continue plan of seventh month calling attention to slant, spacing and alignment.
   B. Have each child practice writing his own name *well.*

9. Ninth month:
   A. Practice on all letters and numerals learned in the past eight months.
   B. Motivate work by means of devices such as these:
      a. Combining the movement exercises and principles of handwriting in such a way as to illustrate a favorite story from the first reader.
      b. Writing a sentence descriptive of a project the class is working out.

Second Grade

I. Objectives:
   1. Motor control:
      A. Continuous co-ordinated movement.
      B. A speed of thirty letters per minute.
      C. A nearer approach to standard movement than in Grade I.

2. Ability to write independently all the digits, small letters and capital letters.
3. Ability to write independently at least forty words from the reading vocabulary.
4. Ability to keep right and left margins in writing.

II. Materials:

1. Unglazed paper of good quality, five-eighths inch ruling.
2. Ordinary pencil with medium soft lead.

III. Content and method:

1. Use the blackboard for new exercises.
2. The small letters should be about one-fourth inch in height.

*** 3. Position should be the same as for first grade.

IV. Requirements by months:

1. First month (Emphasis on swing and rhythm):
   - A. Practice the swinging movement across the page, back and forth, to the count of one-two, one-two, or right-left, right-left.
   - B. Practice the exercises joining letters such as i, e, u, l, joined by long forward strokes, counting on the forward stroke.
   - C. Practice all the digits calling attention to where to begin each digit.
   - D. Write monosyllables to count.

2. Second month (Emphasize swing and rhythm):
   - A. Use a, d, o, w, in exercises with long forward strokes, then with shorter strokes.
   - B. Use c in groups of three joined by short strokes. In like manner, use f, l.
   - C. Make words from the letters practiced.
   - D. Make b.
   - E. Base swinging exercises on q.
   - F. Write phrases.

3. Third month (Emphasize alignment):
   - A. Practice A and E. Use A in phrases.
   - B. Use m and n for swinging exercises.
   - C. Introduce z. Call attention to its form.

D. Practice g and z in groups of three. Watch alignment. Explain that these two letters have loops below the line.

E. Practice h in groups of three. Explain that h has a loop above the line.

F. Make words from these letters and others used last month.

G. Make phrases and sentences. Be sure that the sentences contain words having g's and h's.

4. Fourth month:

A. Introduce right curve with swinging movement.

B. Practice s in groups of three joined by short right curves made with short swinging movements.

C. Practice p, y, r, k, in groups of three.

D. Learn to make C, O, B, I, J, M, N, P, W.

E. Keep up practice on phrases and sentences.

5. Fifth month:

A. Stress small letters j, v, x.

B. Learn the rest of the capital letters.

C. Keep up practice in phrase and sentence.

6. Sixth month:

A. Having taught all the letters, begin now to give extra practice to those most difficult for the class to make.

B. Introduce new words from the reading vocabulary.

C. Correlate with spelling, trying to carry over the skill already attained.

D. Begin to call the children's attention to the method of grading by means of comparison with the scale. Let them compare their papers of last month with those of this month and with the scale.

E. Use sentences that correlate with other subjects.

7. Seventh month (Emphasize spacing, alignment, quality of line, and uniformity of slant):

A. Use memory gems and verses from the reader.

8. Eighth month (Emphasize letter formation):

A. Use parts of poems for practice.

9. Ninth month:

A. Begin to grade more carefully on alignment, spacing, slant, and quality of line.

B. Let the required writing in other subjects take the place of the writing period.

'Test each pupil's work at least twice per month by means of the scales mentioned in "general directions". Rule a grade sheet large enough to keep the record for a semester and record all grades thereon.

Third Grade

I. Objectives:

1. Motor control:
   A. Free, rhythmic movement.
   B. A speed of forty letters a minute.
2. A quality of 45 on the Ayers Scale or an equivalent standard on a similar scale.

II. Materials:

1. First semester:
   A. Unglazed paper with half-inch ruling.
   B. Ordinary pencil with medium-soft lead.
2. Second semester:
   A. Glazed paper with half-inch ruling.
   B. Penholder of medium size with cork or soft rubber tip.
   C. Pen with rounded point.

III. Content and method:

1. Base practice largely on words taken from written work in other subjects.
2. Increase speed, but not so as to interfere with co-ordination.
3. Encourage the children to compare different specimens of their own work. Put the best specimens on the bulletin board from time to time.
4. Allow constructive criticism of the work of others.
5. Continue emphasis on uniformity of slant and alignment.
6. At least once a wek compare specimens with the scale and record results on grade sheet as instructed in Grade II.

IV. Requirements by months:

1. First month:
   A. Review horizontal swing across page.

B. Use exercise consisting of i's joined by long forward strokes, not more than three i's to a line. Count on forward stroke. With same exercise, substitute such letters as u, e, and t for i.

C. Make words from the letters just used.

D. Practice writing the digits, noting carefully form and alignment.

E. Lessons on margin and spacing.

2. Second month:

A. Practice o, w, and b, calling attention to the finish stroke.

B. Practice writing numbers that are being used in the arithmetic lesson.

C. Practice q and f. Call attention to the closing on the base line.

D. By means of words, phrases, and sentences, practice on the letters emphasized this month.

3. Third month:

A. Study the loop letters, k, h, l, b, j, y, z, g. Explain how h is made by combining l and the overcurve which is the first part of n. Let the children turn the paper so as to see that y is an inverted h.

B. For the sake of practice in making capitals, write the names of individual pupils.

C. Practice r and s, calling attention to the sharp turn.

D. Attention should be directed to v and x. Explain while writing the copy on the board that both are based on the over curve which is the first part of n.

5. Fifth month:

A. Emphasize the joining stroke of S and G.

B. Correlate with arithmetic. Show proper spacing in simple problems.

C. Keep up sentence practice.

D. Introduce pen and ink.

6. Sixth month:

A. Review many of the exercises practiced before. This will give confidence in the use of the pen.

B. Use simple arithmetic problems. See to it that the change from pen to pencil does not detract from the form and alignment of the digits.

C. Do not try to increase speed this month. The children must have time to become accustomed to the use of the pen.

D. Use poems from the readers.

7. Seventh month:

A. Use poems and prose quotations. Watch spacing, alignment, quality of line, slant, and letter formation. The children should be taught to keep the small letters, except r and s, the same height, the loop letters the same length.

B. Train the children to criticize their own work. Follow with corrective exercises.

8. Eighth month:

A. Follow the same procedure as in seventh month, but pay more attention to speed.

9. Ninth month:

A. Use the writing period to do required written work in other subjects. Booklets made in connection with language or any other subject are especially worth while.

B. Do not forget the final comparison with the scale.

Fourth Grade

I. Objectives:

1. To gain facility in the processes already learned.
2. To improve muscular co-ordination.
3. A speed of fifty letters a minute.
4. A quality of 50 on the Ayers Scale and 16 on the Freeman Scale or equivalent standards on similar scales.

II. Materials:

1. Same as in Grade III, except that a finer pen may be used.

III. Content and method:

1. Use material from other subjects for drill lessons, but the children should not be obliged to center their thoughts on composing the sentences to be written.

2. Speed drills, carefully timed.
3. If possible to obtain it, the Freeman Chart for the Diagnosis of Faults in Handwriting should be used. The children should be encouraged to criticise their own work. Remember that, this year, the emphasis is on constructive self-criticism developed by constant reference to a standard.

IV. Requirement by months:

1. First month:
   A. Review exercises with small letters.
   B. Much attention to detail.
   C. Study all written work in arithmetic in order to perfect the form of the digits and to secure correct arrangement.
   D. Use a in groups of three for rapid practice. Follow with o.

2. Second month:
   A. Use c, w, m, n, f, in groups of three.
   B. Practice on the capitals based largely upon the direct oval, A, O, C, E.
   C. Use sentences that give practice on the letters named above. Have the children pick out the ones that need the most practice.

3. Third month:
   A. Copy arithmetic lessons in order to get practice on digits.
   B. Write names beginning with I and B, using joining stroke. Follow with J, M, N, P, W.
   C. Use phrases containing loop letters.
   D. Practice small letter, p, in groups of three. Follow with a sentence using this letter several times. Avoid writing the words in columns.
   E. If the working vocabulary of the class includes words beginning with Z and Q, write these words.

4. Fourth month:
   A. Emphasize s, r, v, j, k, x, and capitals N, R, L, S.
   B. Use exercises, words, and phrases.
   C. Practice on sentences containing these letters.

5. Fifth month:
   A. Practice on the rest of the capitals.
   B. Use names of people, places, days, months.
   C. Write paragraphs containing words beginning with capitals.
   D. Keep up practice of exercises used in past months.
   E. Gradually increase speed.
6. Sixth month:
   A. Make new combinations from the old exercises. Write all words recently added to vocabulary.
   B. In all arithmetic work, check the placing of figures.
   C. Select a poem from the reading material of the class and make it the basis for practice.
7. Seventh month:
   A. Select a short poem or several short prose paragraphs for use as a basis for each week's work. Each week pay attention to one factor, and have the children make frequent comparisons. Uniformity of slant, alignment, spacing, and quality of line can be considered.
8. Eighth month:
   A. Base this month's work upon short stanzas of poems that the children enjoy.
   B. The first week, emphasize letter formation, alignment, and spacing.
   C. The second week, emphasize letter formation, alignment and quality of line.
   D. The third week, emphasize slant in addition to the other factors.
   E. The fourth week, drill for speed.
9. Ninth month:
   A. Use writing period for required written work of other subjects, being careful to keep up standards set.

Fifth Grade

I. Objectives:
   1. Increased ability in independent writing.
   2. A speed of sixty letters a minute.
   3. A grade standard of 18 on the Freeman Scale and 55 on the Ayers Scale or equivalent standards on similar scales.

II. Materials:

1. Glazed paper with three-eighths inch ruling.
2. Medium size penholder with cork or soft rubber tip. Same type of pen as in Grade III.

III. Content and method:

1. Children who have had the drill of the first four grades should need but little instruction as to position.
2. The children's desire to reach the grade standard will help to motivate the work.
3. Criticism and grading of the writing done at other periods will help in carrying over writing ability.
4. Correlate closely with other subjects.

IV. Requirements by months:

1. First month:
   - A. Review exercises used in lower grades, but at a higher rate of speed.
   - B. Practice small letters i, e, l, t, b, a, o, w, c, f, d, m, n, u, singly and in combination, analyzing each one more closely than before.
   - C. Check arithmetic papers as to legibility and beauty of figures.
2. Second month:
   - A. Practice capitals A, E, C, O, B, I, S, J, M, N, P, singly and as initial letters of words, analyzing each one more closely than before.
   - B. Practice small letters h, p, y, s, r, k, j, f, g, q in groups of three, and in combination with other letters. Analyze them.
3. Third month:
   - A. Watch margins.
   - B. Practice the dollar sign.
   - C. Use capital Q as initial letter of familiar words.
   - D. In order to show form, spacing, margin, and general harmony, practice writing short letters concerning school affairs.
   - E. Practice capitals W, Z, Q, Y, R, L, S, G, H, K, D, F, T.
   - F. Use review words from past lessons, noting improvement.

4. Fourth month:
   A. If you have a Freeman Diagnostic Chart, put it on the bulletin board where the children can see it.
   B. Practice V, X, U, and phrases containing them.
   C. Practice writing formal letters. Make them such as will motivate the work.
   D. Use an occasional lesson period for comparison of specimens written by the class.
   E. Have each child practice on a statement about his own improvement in writing.

5. Fifth month:
   A. Practice writing simple fractions.
   B. Use vocabulary words.
   C. By the use of sentences, review all letters.
   D. Make speed drills out of familiar sentences.
   E. Use short sentences containing different capitals.

6. Sixth month:
   A. Continue the plan of the fifth month for the first two weeks.
   B. Using only one or two stanzas of a poem or one or two paragraphs from other lessons as the basis of a week's work, finish the month, by grading carefully on letter formation.

7. Seventh month:
   A. Following the plan outlined in "B" of the seventh month, grade on spacing the first week; alignment, the second week; quality of line, the third week; uniformity of slant, the fourth week.

8. Eighth month:
   A. Using longer poems or paragraphs than those used in the seventh month, grade on letter formation, spacing, and slant, the first week; letter formation, alignment, and quality of line, the second week; all five points, the third week, with careful self-grading.
   B. Use two short copies for the fourth week.

9. Ninth month:
   A. Use the writing period to do necessary written work in other subjects.

Sixth Grade

I. Objectives:

1. To make writing carry over to other subjects so efficiently that it will not be necessary to carry handwriting as a subject into the next grade.
2. A speed of seventy letters a minute.
3. A quality standard of 20 on the Freeman scale and 60 on the Ayers Scale or equivalent standards on similar scales.

II. Materials:

1. Same as in Grade V except some unruled paper.

III. Content and method:

1. Any child not having had penmanship training in the lower grades should be helped to acquire proper position.
2. The unruled paper should be used to teach alignment and spacing.
3. Speed drills should be used if a satisfactory rate has not been attained.
4. A formal test should be given at the end of the year to determine who shall be excused from penmanship class for the coming year.

IV. Requirements by months:

1. First month:
   - A. Review formal exercises using i, u, t, l, b, e.
   - B. Practice a in groups of three. Then show how to change a to d, and practice d in groups of three.
   - C. Practice o, w, c, f, q, m, n, g, z, h, p in groups of three and in combination.
   - D. Individual practice on digits as shown necessary by examination and comparison of arithmetic papers.
   - E. Practice capitals A, C, O, E, B, D.
2. Second month:
   - A. Practice y, s, r, j, v, x, in groups of three and in combination with other letters.
   - B. Practice capitals B, P, I, J, M, N, W, Q, Y, L, S, R, singly and as first letters of words.
   - C. Take one period for comparison of writing papers saved from previous lessons.

3. Third month:
   A. Call to mind the comparisons made last month and try to strengthen weak points.
   B. Practice G, H, F, T, U, X, K, V.
   C. Base digit practice on writing decimals.
   D. Write letters, bills, memoranda.
   E. On one or two days, excuse from the regular lesson those whose work has been kept up to standard in penmanship practice and in written work in other subjects. Allow them to plan a writing lesson for themselves.
   F. Give lessons based upon short sentences. By means of the diagnostic chart, determine what practice is needed by each child. Group the children according to the needs revealed, allowing the children mentioned in "E" above to form an independent group. If any member of the independent group shows deterioration in writing, he should be returned to a practice group.

4. Fourth month:
   A. Practice on short sentences and couplets for speed.
   B. Letter writing. Motivate it.

5. Fifth month:
   A. Practice on familiar proverbs.
   B. Speed drills.
   C. Encourage frequent comparisons with the specimens on the chart.
   D. Use a long poem from the reader as a basis for the work of the last two weeks.

6. Sixth month:
   A. Drill on single words that are used daily by the class.
   B. Use copy material that will correlate with other subjects.
   C. Grade carefully, making constant use of diagnostic scale. Emphasize on factor each week as explained in seventh month of fifth grade.

7. Seventh month:
   A. The first week emphasize spacing. Use copies that correlate with other work.

B. The second week emphasize alignment and quality of line.
C. The third week emphasize uniformity of slant.
D. The fourth week pay attention to speed.

8. Eighth month:
A. Use longer selections. The first week grade on letter formation, spacing and slant.
B. The second week grade on letter formation, alignment, and quality of line.
C. The third week grade on all five factors.
D. Fourth week, pay attention to speed.

9. Ninth month:
A. Use the writing period for the preparation of any written work connected with the activities of the school.

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Credit should be given to all the above publications for helping to shape the above course.

OUTLINE

OF

GEOGRAPHY

GEOGRAPHY

First Grade

Specific Aims:

1. To make a beginning in giving the pupil an understanding of the activities of home, school and neighborhood i. e. his social environment.
2. To extend the pupil's acquaintance with his material environment.
3. To begin to develop habits of behavior which will tend to make the pupil a more helpful member of his school, home and community.

Subject Matter:

1. The Family:
   a. Members and their respective duties in the home.
      Desirable characteristics of family relationships

      courtesy honesty patience helpfulness
      cleanliness orderliness obedience self-reliance

   b. Occupations, chores.
   c. Effect of illness of one member upon the duties of the others and hence the value of keeping well.
   d. Necessities for keeping well:
      (1) food—kinds—breakfast, lunch, dinner
      cleanliness in caring for, preparing and handling food
      clean teeth and hygiene of eating
      sources of food—ground, store huckster
      sources for store and huckster, how brought to town—train, trolley, truck, etc.
      bread, meat, milk, butter, eggs, green vegetables
      (2) clothing—needs—seasonal changes—cleanliness
      kinds—wool, cotton, silk, leather, rubber
      where obtained, how obtained, suitability for particular uses
      care of clothing—removal in house
      (3) shelter—needs, seasons, cleanliness
      (a) how built, of what and by whom (helpers)
      lumber, stone, brick, plaster, paint
      where and how obtained

(b) heating, how heated, coal, wood, oil, water
how and where obtained, cleanliness

(c) lighting, electricity, gas, oil, gasoline
how and where obtained
suitable light for reading, writing

(d) ventilation, how and why, schoolroom practice, open windows for sleeping

(e) activity centers—cooking and serving food
recreation—sleeping

(f) recreation and pleasures
games, indoors and out
flowers, gardens, etc.
theaters, etc.
evenings at home, stories, readings, music

2. The Neighborhood:

a. Neighbors of the pupils
where they live, their occupations

b. Workers for the community
where they live, what they do for the pupil
doctor, minister, nurse, blacksmith, storekeeper, etc.

c. Desirable characteristics of neighborhood life
friendliness, helpfulness, respect for property and rights of others, sympathy

d. Gatherings (recreation)
church, school, theater, hall, playgrounds and avoidance of the street

e. Patriotism and holidays
Columbus Day, Washington's and Lincoln's birthdays, Thanksgiving, Christmas, Memorial, Independence and Armistice Days
Respect for the flag, its care, salute

3. Studies of Other Peoples:

Contrasts with pupil's own home and neighborhood
Indians (primitive)
Eskimos (frigid)

Activities:

This list is suggestive only. It is not exhaustive. It will accomplish its purpose if it suggests some of the possibilities. The

teacher and class may develop any number of others. The order is not significant.

1. Booklets:
   a. Occupations of the neighborhood
      policeman, baker, storekeeper, shoemaker, fireman, blacksmith, garageman, carpenter, etc.
   b. Clothing
      sheep—wool; cotton, linen, silk
      seasonal adaptations
   c. Houses
      brick, wood, stone
   d. House furnishings
   e. Foods
      cows—milk—butter—meat
      chickens
      grains
      garden produce, etc.
   f. Flowers, birds, weather, months of the year, moon and stars
   g. Play activities, dolls, toys
2. Cutting:
   Simple objects, pictures and letters pertaining to activities
3. Construction:
   a. Toys, houses, animals, figures, scenery, trees for sand table plats
   b. Dressing a doll—selecting suitable cloth, etc.
   c. Making a house—painting—papering—furnishing

   This may be accompanied by studies of the workers who help build the house and those who help the home.
4. Charts:
   pictures of neighborhood industries with samples of products where possible
5. Dramatizations:
   a. Dinner at home
      manners—courtesy
   b. Helping mother or father
   c. Getting read for bed, arising in the morning, getting ready for dinner

6. Sand Table:
   a. Centers of activity in the home
      recreation—preparation of food—serving of food—sleeping, etc.
   b. Plan showing neighborhood centers
      the doctor—minister—stores—blacksmith, etc.
   c. The farm
      barns—horses—cows, milk, butter, meat—chickens, meat, eggs, fields—corn—wheat—garden produce
7. Collections:
   a. Kinds of cloth
   b. Kinds of berries
   c. Kinds of garden foods
8. General:
   a. Care of room duties—sweeping and dusting
   b. Entertaining—visiting rooms or groups of pupils
   c. Discussion of questions of behavior at school, home or at play
   d. Simple exercises on holidays

Specific Aims:

1. To acquaint the pupil with the way other peoples live and have lived in different environments.
2. To develop habits of helpful, considerate behavior.

Subject Matter:

Review of the work of Grade I including Indian and Eskimo

Studies.

Studies of
- Bedouins (Desert)
- Swiss (Mt.)
- Dutch
- Japanese
- Torrid peoples
- Romans (Ancient)
- Greeks (")
- Tree dwellers (Primitive)
- Cliff " (")
- Pilgrims (Colonial)

Activities:

See list for Grade I.

1. Reading by teacher and by class about the various people studied.
2. Talks by the teacher supplementing the readings.
3. Studies of pictures of these peoples and of their environment.
4. The sand table is very helpful if the work is strictly truthful especially in a geographic sense.
5. Dramatizations in costume of little plays based upon these studies.
6. Games and songs of children in lands studied.
7. Collection of curios, souvenirs and other articles from these lands.

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 interdependencies 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.
   - C. Making of weather charts.

II. Study of
   - A. Directions.
   - B. Use of globes and maps to locate places.
   - C. Land and water masses.
   - D. Mountains, valleys, plains, plateaus, deserts.
   - E. Rivers.

III. Study of Colorado:
   - A. Location.
   - B. Characteristic features:
     1. Surface.
        - a. Mountains:
          1. Rocky Mts.
          2. Pikes Peak.

Problem Method of Attack:

1. Little Journeys to
   - a. Pikes Peak.
   - b. Longs Peak.
   - c. Mt. Holy Cross.
   - d. San Luis Valley
2. By means of

3. Longs Peak.
4. Mt. Holy Cross.
5. Mt. Blanca.
6. Mt. Massive.
7. Spanish Peaks.

b. Canyons, gorges.
c. Valleys:
1. San Luis.
d. Deserts:
1. Colorado.
e. Plains.
f. Plateau.
g. Continental Divide.
h. Rivers.

a. Sand table.
b. Pictures.
c. Post cards.
d. Projectoscope.
e. Stereopticon.
f. Lantern.

C. Industries:
a. Agriculture:
1. Irrigated farming.
2. Dry farming.
b. Fruit raising.
c. Mining.
d. Stock raising.

Problem Method of Attack:
1. Life of a dry farmer.
2. Life on an irrigated farm.
3. Life in a mining camp.
4. Life of a cowboy.

IV. Plant and Animal Life:
A. Plant Life:
1. Trees, grasses, wild flowers common to Colorado.
2. Russian thistle, tumble weed, sage brush, etc.

B. Animal Life:
1. Common animals.
Common wild animals:
a. Coyote.
b. Deer.
c. Beaver.
d. Bear.
e. Mountain sheep.
2. Common birds:
a. Magpie.
b. Housefinch.
c. Mountain bluebird.
d. Mountain bluejay.
e. Meadowlark.
f. Warblers.
g. Thrushes, and so on.

Problem Method of Attack:
Excursions and field trips.
The protection of birds and wild animals.

3. Common Domestic Animals:
   1. Cattle.
   2. Sheep.
   3. Hogs.
   4. Goats.
   5. Fish hatchery.

V. Means of Transportation:

A. Old Trails:
   a. Santa Fe.
   b. Major Longs.
   c. "Switzerland Trail."
   d. Trail between Fort Union & Ft. Laramie.

B. Railroads.

Problem Method of Attack:

1. Same as under III. (Study of Colorado).

VI. Important Cities.

VII. Summer Resorts and Health Resorts:

A. Rocky Mt. Nat'l Park.
B. Estes Park.
C. Colorado Springs.
D. Manitou.
E. Place Sanitarium. (Boulder).
F. Pagosa Springs.
G. Idaho Springs.
H. Mineral Springs.
I. Soda Springs.
J. Hot Springs.
   Cottonwood.
   Poncha.
   Princeton.
K. Ward and Eldora.

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

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 stereopticon lantern and projectoscope will be the means of presenting the subject matter.

Plateau States

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

II. Climate:
- A. Distinctive features:
  1. Altitude — atmosphere.
- B. Weather:
  1. Rainfall.
  2. Sunshine.
- C. West compared with East.
- D. Health resorts.

Problem Method of Attack
1. How did the climate impress settlers?
2. How does the climate impress tourists of today?

III. Plant and Animal Life:
(Correlation with Nature Study)
- A. Plant:
  1. Grasses, cactus, sage-brush, Russian thistle, etc.
  2. Common flowers.
- B. Animal life:
  1. Common animals, prairie dog—etc.
  2. Wild life in the mountains, mountain sheep, antelope, etc.
  3. Common birds—magpie, housefinch, mountain bluejay, grosbeak, etc.

Problem Method of Attack
1. Planning a hunting trip.
2. Laws protecting wild animals.

IV. Population:
- A. Census statistics.
- B. People.
  1. Natives—Indian tribes.
     a. Pueblo Indians.
     b. Sioux, Cheyenne, Comanches, Arapahoes, Kiowas.
  2. Foreign elements—mining districts, sugar beet districts, etc.
  3. White settlers—from the East.

Problem Method of Attack
1. The early settlement of Denver, Colorado Springs, Pueblo, Greeley.
2. Why did the early settlers select these places?

	Problem Method of Attack
V. Industries:	
A. Agriculture:	
1. Irrigation and dry farming.	1. The advantages of irrigation.
2. Sugar beet.	2. What are the advantages of sugar beet industry in Greeley?
3. Potato.	3. To what points are most of the Greeley potatoes shipped?
4. Beans—peas.	
5. Melons.	
B. Fruit raising.	
C. Cattle raising.	
D. Sheep raising.	
E. Mining.	Gold—Study of Cripple Creek.
F. Smelting.	Silver—Study of Aspen.
G. Granite industry.	Lead—Study of Leadville.
H. Cement industry.	Tungsten—Study of Nederlands.
I. Salt mining.	Coal—Study of Trinidad.
J. Manufacturing.	Radium—Study of Vanadium.
K. Fish hatchery.	(The Chamber of Commerce in each of these towns will gladly send literature).
L. Canning vegetables.	Cement—Study of Portland.
M. Pickle industry.	Sugar—Study of Greeley and Brighton, Arkansas Valley.
N. Marketing.	Flour—Study of Longmont.
	Pottery—Study of Colorado Springs.
	Condensed and Malted Milk—Study of Fort Lupton.

Fourth Grade

Beginning with the home of the child, shelter, food and clothing are studied. A comparison is made of homes in different lands, the method of obtaining articles for shelter, food and clothing is studied; and places from which these different articles are obtained are located.

This is followed by a study of the Rocky Mountain and Pacific Section and Southern Section. This work is developed through studying the industrial, social, civic, and political conditions in these sections. Conditions are created so as to stimulate the child's thinking by the problem method of attack.

Study of Shelter, Food, and Clothing

I. How Houses are Built:
- A. Lumber.
- B. Building Stone.
- C. Clay and Brick.
- D. Cement and Concrete.

II. The Clothing We Wear:
- A. Cotton.
- B. Sheep and Wool.
- C. Silkworms and Silk.
- D. Flax and Linen.
- E. Leather.
- F. Furs.
- G. Rubber.

III. Our Food and Drink:
- A. Corn.
- B. Wheat.
- C. Oats and Oatmeal.
- D. Rice.
- E. Fruits.
- F. Sugar.
- G. Cattle and Meat.
- H. Hogs and Pork.
- I. Fish and Fishing.
- J. Oils:
  1. Olive.
  2. Peanut.
  3. Cocoanut.
- K. Coffee.
- L. Tea.
- M. Cocoa and Chocolate.

Rocky Mountain and Pacific Section

I. Railroads:
- A. Characteristic features:
  1. Mountain ranges — Sierra Nevada.
  2. Coast ranges — Cascade.
  3. Great valleys:
     Yosemite.
     San Luis.
     San Joaquin.
     Williamette.
  3. Plateaus.
  4. Crater Lakes.
  5. Rivers.

Problem Method of Attack.
1. A trip over the Royal Gorge.
2. Mountain Passes, Platte Canon, etc.
3. The building of the Union Pacific, or other railroads.
4. How does the scenery along the U. P. compare with the other Railroads in Colorado?

Problem Method of Attack.
1. A trip to these various points of interest.
2. Follow same method as suggested in Third Grade under III. (Study of Colorado).

- B. Comparison with Pacific Slope.
- C. Density of forests—forest reserves.

II. Climate:
- A. Altitude.
- B. Rainfalls and temperature.
- C. 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.
2. Contrast with Florida and Colorado.

B. Lumbering.

C. Agriculture:
   Wheat.
   Cotton, etc.

D. Mining:
   Gold.
   Silver.
   Lead.

E. Fish Industry:
   Catalina Island Fish.
   Salmon—Columbia River.

F. Seaweeds—Kelp.

G. Manufacturing:
   Condensed Milk.
   Lumber.
   Flour.

H. Irrigation.

I. Smelting.

J. Commerce.

IV. Spanish Missions:

A. Where located.
   (See History outline).

B. History of them taken in history work.

Problem Method of Attack.

1. A trip to a Fruit Ranch.
2. Why is California called the Fruit basket of the United States?
3. Lumber Camp life.
4. Man's relation to soil and minerals.
5. Life of a salmon fisherman.
6. Comparison with local industries.

Southern States

I. Location and Position of States.

II. Surface and General Appearance:

A. Mountains:

1. Appalachian.
2. Blue Ridge.

B. Plains, hills:
   1. Atlantic Coastal Plain:
      a. Sand reefs.
      b. Sand dunes.
      c. Coral Islands.
   2. Piedmont Belt.
   3. Gulf Coastal Plain.

C. Coastline.

D. Rivers, lakes, etc.
   1. James.
   2. Potomac.
   3. Savannah.
   4. St. Johns.
   5. Mississippi.

E. Oceans:
   1. Atlantic.
   2. Gulf of Mexico.

G. Soil.

III. Climate:
   A. Temperature.
   B. Short mild winters; long warm summers.
   C. Rainfall.

IV. Characteristic Products:
   A. Tobacco.
   B. Cotton.
   C. Sugar Cane.
   D. Rice.
   E. Fruits:
      1. Peaches, apples.
      2. Tropical and sub-tropical fruits — oranges, pineapples, grapefruits, lemons, limes, etc.
   F. Vegetables.

Problem Method of Attack:
1. Extent to which South raises the same farm products as the North.
2. Why is the South better suited to the production of tobacco than other sections of the United States?
3. Why has the South almost a monopoly of cotton?
4. Why has production of cotton in the South decreased to such an extent in past two years?
5. A visit to a cotton plantation in South Carolina.
6. Comparison of sugar cane and sugar beet as used in making sugar.

7. Visit to sugar cane plantation in Louisiana.
8. Why is there a promising future for rice production in the South?

Problem Method of Attack:

1. Why can tropical and subtropical fruits be raised in Florida?
2. A visit to the orange groves of Florida.

Problem Method of Attack:

1. What special opportunities does the South offer to farmers, especially truck farmers?

G. Fish.

H. Cattle, hogs.

I. Forests:
   1. Hardwoods, oak, gum, chestnut, hickory, walnut, etc.
   2. Southern pine.
      a. Naval stores.
      b. Lumber.

J. Minerals:
   1. Coal, natural gas, petroleum.
   2. Iron ore.
   3. Stone—marble, limestone, granite.
   4. Aluminum or bauxite.
   5. Sulphur.
   6. Phosphate.

Problem Method of Attack:

1. Why has Birmingham, Alabama, been called the Pittsburgh of the South?

V. Industries:
   A. Agriculture:
      1. Farming.
      2. Fruit Raising.
   B. Fishing.
   C. Quarrying.
   D. Mining.
   E. Lumbering.
   F. Manufacturing.

Problem Method of Attack:

1. Why, with raw materials, water power, means of transportation, does the South do only one-third as much manufacturing as the North?

G. Commerce.

VI. Winter Resorts:

A. Palm Beach.
B. Miami.
C. St. Augustine, etc.

VII. Important Cities:

A. New Orleans.
B. Louisville.
C. Atlanta.
D. Birmingham.
E. Richmond.
F. Memphis.
G. San Antonio.
H. Dallas.
I. Houston.
J. Nashville.

2. Do you think manufacturing will increase or decrease in the South? Why?

Problem Method of Attack:

1. Why are Palm Beach, Miami, St. Augustine and many other Florida cities such popular winter resorts?

Problem Method of Attack:

1. Why is New Orleans the most important city in the South?
2. The nine other largest cities of the South are: Louisville, Atlanta, Birmingham, Richmond, Memphis, San Antonio, Dallas, Houston, Nashville. Explain the reasons for the growth of each of these cities.

Central States

1. Surface and General Appearance:

A. Characteristic features:
1. Rivers, Great Lakes.
2. Plains, Prairies, Uplands.
3. Forests.
4. Soil.

Problem Method of Attack:

1. Advantages and disadvantages over those of the western states.
2. Relation of man to land forms.
3. Relation of man to climatic conditions.
4. Relation of man to vegetation and animal forms.

II. Climate:

A. Distinctive features:
1. Altitude—atmosphere.

B. Weather:
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.
Truck farming.

B. Fruit raising:
1. Apples, berries, 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:

1. Life on a Corn Farm in the Middle West.
2. Life on a Wheat Farm in Kansas.
3. Life on a Dairy Farm in Wisconsin.
4. Life on a Fruit Farm in Michigan.

Problem Method of Attack:

Study 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.

Middle Atlantic States, Including New England

I. Location and position of states:
A. Boundaries.

II. Surface and General Appearance:

A. Mountains:
   1. Adirondacks.
   2. Appalachian:
      a. White Mts.
      b. Green Mts.
      c. Blue Ridge.
      d. Great Smoky Mts.

Problem Method of Attack:
1. Comparison with Rocky Mts. —Advantages and disadvantages.

B. Plains, plateaus, hills, valleys:
   1. Coastal Plain.
   2. Piedmont Belt.
   3. Delaware Water Gap.
   4. Mohawk Valley.
   5. Hudson Valley.

Comparison with plateaus in the Rocky Mountains.

3. Relation of man to land forms.

C. Forests.

D. Coastline.

E. Rivers, lakes, bays, waterfalls and rapids:
   1. Connecticut, Merrimac, Penobscot, St. Lawrence, Hudson, Alleghany and Susquehanna rivers, etc.
   2. Lakes Erie and Ontario.
   3. Lake Chaplain and many smaller lakes.
   4. Cheseapeake Bay.
   5. Delaware Bay.
   6. Massachusetts— Boston Harbor
   7. New York Bay and Harbor.
   8. Long Island Sound.
   9. Many good harbors along the coast.

5. Comparison with bays of the West.

F. Ocean:
   1. Atlantic.

G. Soil.

III. Climate:
- A. Rainfall.
- B. Snows.
- C. Severe winters, mild summers.
- D. Temperature.

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

IV. Characteristic Products:
- A. Grains.
- B. Fruits:
  1. Berries and small fruits (cranberries).
  2. Orchard fruits.
  3. Grapes.

Problem Method of Attack:
1. Life of an Oyster Farmer on Cheseapeake 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, sandstone and slate.
  3. Salt and gypsum.

V. Industries:
- A. Manufacturing.
- B. Agriculture:
  1. Farming.
  2. Fruit raising.
- C. Fishing.
- D. Quarrying.
- E. Mining.
- F. Lumbering.
- G. Paper Making.
- H. Commerce.

Problem Method of Attack in a study of New England:
1. Life in the Maine Woods.
2. Life of a Fisherman at Glouster, Newfoundland.
3. Life in a Maple Sugar Camp.
4. Life in a Cotton Mill.
5. Life in a Woolen Mill.
6. Life of a Granite Quarryman.
7. Life in a Munition Works.

VI. Education and Musical Centers:
- A. New York City.
- B. Massachusetts:
  1. Boston.
  2. Cambridge.

VII. Summer Resorts.

Problem Method of Attack:
1. How do these compare with those of the West?

VIII. Important Cities.

Project Method of Attack:
1. Life in New York City, Buffalo, Boston, Baltimore, Pittsburgh, Philadelphia and Washington.

Note—Use of stereopticon lantern, field trips and excursions, sand table charts, maps and other apparatus furnish opportunity for working out projects.

Our Neighbor on the North, Canada and Newfoundland

I. Location.

II. Surface Features and General Appearance—Compared with United States:
- A. Plains.
- B. Plateaus.
- C. Mountains.
- D. Valleys.
- E. Rivers:
  1. St. Lawrence.
  2. Saskatchewan.
  3. Mackenzie.
- F. Lakes:
  1. Great Lakes.
  2. Winnipeg.
  3. Great Bear Lake.
- G. Gulfs and Bays, etc.:
  1. St. Lawrence.
  2. Hudson Bay.
  3. Queen Charlotte Sound.
- H. Coast.
- I. Oceans.
- J. Soil.

III. Climate—Compared With Northern United States:

A. Climatic Divisions.
B. Rainfall.
C. Snow.
D. Temperature.
E. Long hours of sunlight.
F. Long severe winters, short cool summers.
G. Japanese current, Labrador current.
H. Winds.

Problem Method of Attack:

1. Canada is much larger than United States. Why can it never be as important a nation?
2. Why does the western coast of Canada have a much milder climate than the eastern coast?

IV. Characteristic Products:

A. Grains:
   1. Wheat.
   2. Oats.
   3. Barley.
   4. Flax.
   5. Rye.
C. Cattle and Sheep raising.
D. Dairy Products.
E. Fruits—Apples, berries.
F. Vegetables.
G. Lumber.
   1. Hard wood.
   2. Pulp wood.
H. Fish.
I. Furs.
J. Mines.
   1. Copper.
   2. Nickel.
   3. Cobalt.
   4. Iron.
   5. Coal.
   6. Gold.
   7. Silver.
   8. Lead.
   9. Asbestos.
   10. Salt.
   11. Oil.

Problem Method of Attack.

1. Which section of Canada is growing in importance most rapidly?
2. Canada's present population is 8,000,000 but it has been predicted that by end of this century it will be 80,000,000. What is the possible growth of Canada in the future? Along what lines? What natural resources does Canada have which are as yet not being developed to best advantage?
3. Why are we particularly interested in Canada?

V. Industries:

A. Agriculture.
B. Ranching.
C. Fishing.
D. Trapping.
E. Lumbering
F. Manufacturing.
G. Mining.

VI. Government—Compared with United States.

Problem Method of Attack.

1. Compare government of Canada with that of United States.

VII. Important Cities:

A. Montreal.
B. Toronto.
C. Quebec.
D. Ottawa.
E. Halifax.
F. St. John.
G. Winnipeg.
H. Edmonton.
I. Vancouver.
J. Dawson.

Problem Method of Attack:

1. Why are there no forts or or other fortifications along the boundary line of United States and Canada?
2. Why are Ontario and Quebec the most thickly settled provinces of Canada?

Dependents of the U. S.

Alaska

I. Location.

II. Surface and General Appearance:

A. Mountains.
B. Plains, plateaus, hills, valleys.
C. Rivers.
D. Ocean.
E. Soil.

III. Climate:

A. Severe winters, short summers.
B. Temperature.
C. Snow.
D. Rainfall.
E. Midnight Sun.

Problem Method of Attack.

1. Why is the S. E. section the most developed section of Alaska.
2. What are the prospects for the development of northern and western sections of Alaska?

IV. Characteristic Products:

A. Grain.
B. Vegetables.
C. Berries.
D. Forests.
E. Fish.
F. Reindeer herds.
G. Furs.
H. Minerals.

Problem Method of Attack.

1. Has Alaska been worth the $7,200,000, that it cost, to the United States? Why? How?
2. A visit to Alaska to see its fish, fur and minerals.

V. Industries:
- A. Mining.
- B. Fishing.
- C. Canning.
- D. Trapping.
- E. Manufacturing.
- F. Lumbering.
- G. Agriculture.

Problem Method of Attack.

1. What should the United States government do to protect and develop Alaska so that is will be of more value in the future?

VI. People—Eskimos, Americans.

VII. Important Cities:
- A. Juneau.
- B. Sitka.
- C. Wrangel.
- D. Fairbanks.
- E. Nome.

West Indies

I. Location of Important Islands:
- A. Cuba.
- B. Porto Rico.
- C. Jamaica.
- D. Haiti.

Problem Method of Attack.

1. What interest does the United States have in the West Indies?

II. Surface and General Appearance:
- A. Mountains.
- B. Plains.
- C. Ocean.
- D. Harbors.
- E. Soil.

III. Climate:
- A. Even temperature. Influence of ocean.
- B. Rainfall.
- C. Trade Winds.

Problem Method of Attack.

1. Why would you not care to live in the West Indies?

IV. Characteristic Products:
- A. Sugar cane.
- B. Bananas.
- C. Coffee.
- D. Tobacco.
- E. Tropical fruits — pineapples, cocoanuts, spices.
- F. Vegetables.

Problem Method of Attack.

1. Why does Cuba in one year sometimes produce ten times as much sugar as United States?
2. What are our relations with these Islands?

G. Woods—cabinet woods, dye woods.

H. Minerals:
1. Iron Ore.
2. Asphalt.

V. Industries:
A. Agriculture—farming, fruit raising.
B. Mining.
C. Lumbering.
D. Manufacturing:
1. Cigars and cigarettes.

VII. People:
Americans, English, Spanish, Natives.

VIII. Important Cities:
A. Havana.
B. Kingston.
C. San Juan.
D. St. Thomas.

Central America

I. Location:
Names of important countries.
Panama Canal Zone.

Problem Method of Attack:
1. What is the question of chief interest to us in this region?

II. Surface Features and General Appearance:
A. Mountains, volcanoes, earthquakes.
B. Plateaus.
C. Plains.
D. Coast.
E. Soil.

Problem Method of Attack:
1. What were some of the difficulties that were met in building Panama Canal?

III. Climate:
A. Temperature.
B. Rainfall.
C. Altitude.

IV. Characteristic Products:
A. Bananas.
B. Coffee.
C. Cocoa.

D. Sugar Cane.
E. Rubber.
F. Some Cotton.
G. Forests:
1. Mahogany.
2. Rosewood.
3. Logwood.

V. Industries:
A. Lumbering.
B. Agriculture.

VI. People.

VII. Important Cities:
A. Panama.
B. Colon.

Problem Method of Attack:
1. What advantage has the Canal been to United States? To Central America? To European Countries? To South America? To Asiatic Nations?

Philippines

I. Location:
A. Luzon.
B. Mindanao.

Problem Method of Attack:
1. How did we come into possession of the Philippine Islands?

II. Surface Features and General Appearance:
A. Mountains:
1. Volcanoes.
B. Coast.
C. Bays, harbors.
D. Soil.

III. Climate:
A. Temperature.
B. Rainfall.
C. Winds.

IV. Characteristic Products:
A. Sugar Cane.
B. Rice.
C. Corn.
D. Cocoanuts.
E. Tobacco.
F. Manila Hemp.
G. Timber
1. Gum.

Problem Method of Attack:
1. Of what value are the Philippine Island to the United States?

2. Resin.
3. Dyewoods.
4. Tanbark.
5. Rattan.
6. Bamboo.
7. Rubber.

H. Minerals:
1. Gold.
2. Copper.
3. Silver.
4. Platinum.
5. Petroleum.
6. Sulphur.
7. Iron ore.

V. Industries:
A. Agriculture.
B. Lumbering.
C. Mining.
D. Manufacturing:
1. Cigars.

VI. People:
A. Americans.
B. Natives:
1. Aborigines of Negritos.
2. Malays.

Problem Method of Attack:
1. What benefits has our government brought to the Philippines?

VII. Important Cities:
A. Manila.

Problem Method of Attack:
1. Some Filipinos think they should have their independence. What do you think about it? What are the reasons for and against the independence of the Filipinos?

Hawaii

I. Location.
II. Surface and General Appearance:
A. Mountains—volcanoes.

B. Coast.
C. Ocean.
D. Bays.
E. Soil.

III. Climate:
A. Even temperature year around.
B. Influence of ocean.
C. Rainfall.

IV. Characteristic Products:
A. Sugar cane.
B. Pineapples.
C. Bananas.
D. Coffee.
E. Forests.

Problem Method of Attack:
1. Of what value are the Hawaiian Islands to United States?

V. Industries:
A. Agriculture:
1. Farming and fruit raising.
B. Lumbering.
C. Fishing.

Problem Method of Attack:
1. In what ways has the United States developed the Hawaiian Islands?

VI. People:
A. Americans.
B. Natives.
C. Japanese.
D. Chinese.
E. Filipinos.
F. Spaniards.

Problem Method of Attack:
1. Why is there such a mixture of races of people on the Islands?

VII. Important Cities:
A. Honolulu.

Grade Six

General Aim:

1. Further development of reasoning from cause to effect, or vice versa.
2. To show further how the powers and effects of nature have been adapted to the use of man.
3. To bring to the minds of the pupils the extent to which geographical conditions have modified industries and modes

of living; have brought about changes of locations of peoples, and social conditions of peoples.

4. To show the helpful guidance of a government over the transportation, commerce and development of a country.

Specific Aims:

1. To awaken interest in South America, her problems, and our trade and other relations with her.
2. To show briefly something of the political and racial background of peoples.
3. To give pupils a practical working knowledge of Africa, Asia, and Australia.
4. To fix knowledge of most important locational points.
5. To awaken and strengthen the interest of pupils in people of countries studied.

Methods:

Use the problem method to develop central thought and organization and reason. Use problems from nature to man, rather than those dealing with man's relation to man—leaving the latter for the seventh grade.

Teach pupils to organize material arranging detail of information around a specific idea or question; i. e.,

a. How conditions of nature have affected man's home life.
b. How these conditions have caused settlement of a community.
c. How geographical conditions control commercial development.

Make the fullest possible use of pictures, balopticon, magazines, reference books, library, etc.

South America:

Introduction—(From the Courses of the Chicago University Elementary Schools.)

"The co-operation of North and South America, if affected for righteous purposes, will be tremendously influential in reconstructing the world relationships upon higher planes, and in helping to maintain world-peace.

"There is no basis for a patronizing attitude on our part. South Americans have as much to give us as we can possibly give them. The attitude of the present elementary school children

of the United States makes or mars this complimentary relationship, thus joining forces for world-good that lies in the Americas. We attempt, therefore, to bring each child's responsibilities in the matter home to him by showing him that he will soon be in a position to help decide South American questions. In this way a foundation may be laid for the achievement of an ideal relationship."

History—Spanish explorers and settlement—Columbus, Magellan, Balboa, Cortez, Pizarro, Coronado, Bolivar, The Monroe Doctrine, Panama Canal. Following the ideas suggested in these names, study enough to know of their connection with the progress and life of South America.

South America—as a whole:

1. Compare South America with North America as to position, size, shape, coast line, climate, mountains, rivers, population, cities, etc.
2. Teach regionally: Amazon, Orinoco, Brazilian Highlands, LaPlata, Andean, Patagonian.
3. Teach countries by outline.
4. Commerce:
   a. Products of interest to the United States:
      x. From tropical regions: rubber, coffee, cocoa, tropical fruits, hardwoods.
      y. From temperate regions: nitrates, minerals, cocaine, vegetable ivory.
      z. Asphalt.
   b. Our industrial rivals in production of: wheat, livestock, animal products.
   c. Possibilities of future trade.
5. Influences promoting better understanding with Latin American countries—Pan-American Union and relations.

General Outline for the Study of a Country in Grade Six:

1. Position—hemisphere, zones, oceans, continents.
2. Relief—mountains, plains, peninsulas, plateaus.
3. Drainage—as determined by 2; rivers and lakes.
4. Climate:
   Temperature, as determined by 1 and 2:
   Rainfall.
   Winds.

5. Chief natural resources—as rich lands, plains, forests, minerals, access to trade, etc.
6. Industries—as result of 1-5.
7. Trade and transportation.
8. Large cities.
9. Lives and customs of the peoples.
10. Racial situation (this is of special importance in South America, Africa, and Australia).

Note—Stress winds as controlling rainfall, and rainfall as influencing vegetation, as in case of silvas, and the pampas.

Time Division of the Work for Six-A—(Submitted as a guide, to be adjusted to local conditions and length of term):

Africa—three weeks.
Asia—six weeks.
Australia and Pacific Islands—four weeks.
Earth as a Whole—four weeks.

SIX-B

North America and United States as a whole—four weeks.
Alaska and Outlying Possessions—three weeks.
Canada—two weeks.
Central America and Mexico—two weeks.
South America—six weeks.

The United States:

Problem—The United States has become one of the great commercial nations of the world. Account for this.

I. Geographical position:
   a. North Temperate Zone.
   b. Physical relation:
      1. To the greatest nations of western Europe.
      2. To the rapidly developing countries of South America and Canada.
      3. To the Orient, with its almost limitless opportunities for trade.
      4. To our territories and dependencies.

II. Surface features:
   1. Coastal plains and river valleys.
   2. Extensive inland plains.
   3. Mountain systems.
   4. Navigable lakes and rivers.

III. Climate:

Temperate, favoring a great variety of products.

IV. Natural resources:

1. Soils—in great variety, adapted to all kinds of vegetation, both natural and cultivated.
2. Mining deposits—unsurpassed in variety and extent—Coal, metals, ores, building stone, material for brick and cement, petroleum, natural gas, etc.
3. Forests—of great extent, with nearly all most important varieties hardwood and softwood timber.
4. Native grasses furnishing pasturage for great herds.
5. Oceans, lakes and rivers, furnishing transportation, power, water for irrigation and municipal uses.
6. Long coast lines, numberless harbors for commerce.

V. Industries springing from the above resources—fishing, lumbering, mining, agriculture and commerce. These afford shelter, clothing and profitable employment for 105,000,000 people.

VI. People—A blending of all nationalities, with opportunity for broad education and development of social and industrial ideals.

VII. Government—A democracy, encouraging individual and national attainments for the good of all the people.

Table 36—(From 3rd yr. bk.—Dept. Superintendence). The first 30 cities of the United States ranked in order of importance:

1. New York, N. Y.
2. Chicago, Ill.
3. Philadelphia, Pa.
4. Boston, Mass.
5. San Francisco, Calif.
6. Detroit, Mich.
7. St. Louis, Mo.
8. Washington, D. C.
9. Pittsburgh, Pa.
10. Los Angeles, Calif.
11. Cleveland, Ohio
12. New Orleans, La.
13. Baltimore, Md.
14. Kansas City, Mo.
15. Brooklyn, N. Y.
16. Seattle, Wash.
17. Minneapolis, Minn.
18. Cincinnati, Ohio
19. Buffalo, N. Y.
20. Milwaukee, Wis.
21. Indianapolis, Ind.
22. Denver, Colo.
23. Portland, Ore.
24. Omaha, Nebr.
25. Atlanta, Ga.
26. Newark, N. J.
27. Memphis, Tenn.
28. Columbus, Ohio
29. Toledo, Ohio
30. Louisville, Ky.

Problems in Geography, Grade Six

United States:

1. What were the chief difficulties in making homes in the new land of America?
2. How is it that the Spanish reached the Pacific Coast and settled parts of it ahead of any other people?
3. What are four important things that guide people in their choice of homes?
4. How is it that we find so great a difference in the degree of comfort and culture between the people of Mexico and those of the United States?

Central America:

1. Panama Canal—Work out some project or problem on the Canal, perhaps one selected by the class.
2. Who were Majas and something of their reign and civilization.

Mexico:

1. Why have so many capitalists desired to invest money in Mexico? (Consider climate, location, surface, rainfall, products, etc.).
2. How can the United States and Mexico be of mutual benefit to each other?
   a. Consider products desired by United States—oils, silver, coffee, agave, tropical fruits.
   b. Products of United States desired by Mexico—mining, and farming machinery, steel rails, capital, etc.
3. Determine the reason for the great difference in the degree of civilization between the people of Mexico and the United States.
4. Make some study of racial influences in Mexico.

South America:

1. If you were a salesman from a firm in the United States, what would you study to be a success in South America? (Language, laws, customs, goods, seasons, etc.).
2. Why is Chile, on the Pacific Coast, a desert, when Washington and Oregon have plenty of rain?
3. South America was settled long ago, before North America, but is not nearly as well developed. How will we explain this?

4. An Argentine dealer often will buy a harvester from England or Germany, paying more for it, and taking longer to get it, than from the United States. What is wrong with our sales?
5. Why will the trade of South America endure for all time? (Tropical produce vs. temperate zones).
6. Why is South America called the "Land of Opportunity?"
7. South America has richer deposits of minerals in their Andes than we have in the Rockies; their yearly output is much smaller than ours. Why? Can you suggest a remedy?
8. Compare Brazil with United States in size, races, wealth, industries, progress and futures.
9. Problems of production—rubber, cocoa, coffee, nitrates, etc. Please USE THE BALOPTICON.
10. How has the climate affected the distribution of emigrants from Europe?
11. What particular advantages for trade does the position of Colombia give it?
12. How do the temperature and rainfall affect the distribution of the products and industries of South America?
13. How is it that Argentine, lacking the attractions of gold and silver, and far removed from North America and Europe is developing so fast?
14. Why has the trade of Argentine been chiefly with Europe rather than with the United States?
15. What things have determined the position of the coffee belt?
16. Why does the greater part of the west coast possess no good harbors?
17. How is it that South America has so many great rivers?
18. Why is it the natives of the lowland forests live such a poor life while upon the highlands they have reached a much higher civilization?
19. What are the causes for the present backward condition of much of South America?
20. How far will our knowledge of the rainfall of North America aid us in understanding rainfall of South America?
21. How can we account for the fact that it was only in the highlands of the Andes that the natives were at all civilized?

22. Why has the rule of the Spanish and their descendants done so little for the Indians and their country?
23. With what other lands can we compare the valley of Chile?
24. What obstacles must be overcome before this rich Amazon country can ever have many white settlers?
25. Why is the production of raw materials in South America much more important than manufacturing?

Australia:

1. During the World War millions of bushels of wheat were eaten by the mice in Australia. Why did this happen, when food was so needed by the soldiers?
2. How are the animal and plant life of Australia different from that of other countries?
3. How would the life of a pioneer in our Western country differ from that of a pioneer in Australia?
4. If Canada and Australia were interchanged, how would it affect the industries of each? (State clearly).
5. The aborigines of Australia—
6. Why may Australia be called "The Lonely Continent?"
7. Why does Australia, although extending over twenty-eight degrees of latitude, exhibit so slight a diversity of climate?
8. What sort of a climate should we expect of Southern Australia lying as it does partially within the sweep of the westerly winds?

Asia:

1. If Siberia's rivers flowed south what effect would it have upon her commerce?
2. If a ship is going from the United States to Asia what would be their exchange of products?
3. Can Asia develop more in the next 100 years than she has in the past?
4. How has India with her dense population been helped by England to survive her famines?
5. Japan is about equal to California in size, and about one-sixth of her land is tillable. She supports twenty-five times as many people. How is she able to do this? Where will her future population go? Why do they wish to go to California?

6. Japan has spread out over a thousand small islands. A century ago she was a weak heathen nation; today she is a world power. How has geography helped this? Why do the United States and England fear her? (?)
7. How may the increasing population of Japan be a menace to world peace?
8. How has Japan's location affected her characteristics as a nation?
9. Show that the geographic position of Japan has influenced the life of the people.
10. What influences has the size of Japan had on the daily life of the people?
11. Why is it there are in Asia no great river systems such as the Mississippi, Amazon, or Congo?
12. Why is it that a large part of Asia, both highlands and lowlands, possesses a desert character?
13. What has led to the recent spread of Europeans into Asia?
14. What is there about the "Mesopotomia" region which made it favorable to the development of one of the earliest civilizations?
15. How can geography help us to understand the reasons for the many races, languages, religions and customs of the Hindus?
16. What are the dangers and difficulties of life upon the great river deltas?
17. Why is it that the Chinese depend so completely upon bamboo for almost every purpose?
18. How is it that Japan has in the last 50 years developed into the foremost nation of the east while China has as yet changed but little?
19. How should the exports and imports of Japan compare with those of China?
20. Under what disadvantages does Japan exist as regards the increase of her population? How can they be met?
21. How is Japan more favorably situated for trade than is England?
22. Why is it that Siberia contains such a small native population?
23. What is the chief need of Siberia in order to make it a prosperous progressive country?

24. Why is Japan more progressive than China when much inferior to China in size, population and natural resources?
25. Why is Japan the only nation of Asia that is numbered among the Great Powers?
26. What influence has the worship of ancestors had upon the progress of China?

Africa:

1. What conditions have we already learned are in general most favorable to the progress of any people in civilization?
2. Where should we expect that the development of people from a savage to a civilized life would be delayed or not take place at all?
3. What have we discovered has been the influence of different features of the earth's surface upon communication?
4. Why is it that within the tropical belt of Africa there is found the largest desert as well as the largest tropical forest in the world?
5. What is the present result of the efforts of Europeans to partition Africa?
6. How can we account for the fact that the part of the continent which contains the most backward peoples contains the largest variety of great animals.

Problem Lessons:

1. Compare the climatic features of India and United States as to Latitude, Wind Belt, Rainfall, Altitude.
   a. Through how many degrees of latitude do India and United States extend.
   b. What portion of India lies in same latitude as Colorado?
   c. What is the extreme southern limit of India? Of United States?
   d. What portion of United States lies in same latitude as Ceylon?
   e. What states in our United States have same latitude as Bombay?
   f. What important cities of United States lie in the same latitude as Calcutta? Delhi?
   g. Show how the ocean currents affect climate of India

2. Compare wind belts and rainfall of China with those of the United States.
   a. Westerlies.
   b. Horse latitudes.
   c. Trades.
   d. Monsoons.

3. Work out comparison of China and United States in these particulars:
   a. Locate Westerlies in each of these countries.
   b. In what direction is the air moving?
   c. Is the air becoming warmer or cooler?
   d. What of its capacity to hold moisture?
   e. What is the effect on the rainfall in each country of cyclonic winds or monsoons? Why more important in China?
   f. What effect on the rainfall of each country does the proximity of the ocean have?
   g. What effect on rainfall do the ocean currents have?

4. Compare Japanese agriculture with American:
   A. What climatic factors favor the promotion of agriculture in Japan? Compare the climatic and surface conditions of Japan with that of corresponding sections of United States that lie in same latitude.
   B. What is the area of Japan proper? How compare with area of the United States? How does the population compare per square mile? How will these facts affect the practice of agriculture?
   C. The average farm of Japan contains about two and one-half acres. Farms, at their best, seldom contain more than seven and one-half acres. Compare this with the size of many of our Middle West farms in the United States.
   D. Japanese farmers cultivate their land intensively to the very heart of the soil. They obtain largest yield per acre. Why then, are Japanese farmers so poor, raising barely enough to subsist on? How does their system of farming differ from that of the Western farmers in the United States? Show that more intensive methods should be used in the United States.

E. Every member of the farmer's family works from early to late in Japan. Men and women work, children too, when not in school. Women reap crops with hand sickle; boys beat the ears off in the field; men all take turns in cleaning; all hands help in hauling. American tools and farm machinery are being introduced into Japan, but most work done by human labor. Intensive culture, intensity of labor are the chief characteristics of agriculture of Japan.

F. What are chief products of Japan? What geographic forces make Japan especially fitted for culture of silk or tea?
(Japan at First Hand, by Joseph Clarke)

Religions of China, Japan and India:

1. Shintoism.
2. Buddhism.
3. Confucianism.
4. Brahminism.

The following are some of the more important precepts and teachings of the above religions. Reading them over, do you think they would be favorable to progress?

1. Shintoism, the national cult of Japan, is a system of ancestor worship. It can hardly be called a religion. In Shinto those who have passed on are regarded as gods. The parents and grandparents of the family are supposed to be godlike spirits, who devote their time and attention to care of those still on earth. Therefore, they must be worshiped and honored with offerings every day. If they become offended, they may do a great deal of harm.

There are also other gods—many of them—fire, wind, thunder, water, and god of good women, god of the sun, the rice god, etc., that must be appeased now and then.

Show how such a system of religion affects the progress of a people. Will they be apt to favor new ideas, new inventions or new ways of doing things?

2. Buddhism is the religion of the commor people. It exists and thrives side by side with Shintoism. Many homes have two family altars, the Buddhist and the Shinto ancestor shrine. Buddhism has had a great deal to do with the molding and forming of the national characteristics of the Japanese. It deals not with the morals or dogmas. Its philosophy is idealistic and mystic. The

common people do not attempt to understand it, and content themselves with performance of the simple rites and ceremonies.

Can you show in what way Buddhism has affected the characteristics of the people?

3. Confucianism was introduced in Japan through the influence of the Chinese. These are some of the things that Confucianism teaches: Let each man stand firm in the station in which he was born. The first duty is to parents—the wife is to reverence and obey her husband's parents. The younger brother obeys the older brother. The common man cannot discern the truth, and his safety lies in being under some wise man's rule.

4. Brahminism or Hinduism teaches the caste doctrine. At first there were only four castes, but now there is one for each trade. Members of different castes cannot associate. A man must do the work of his own caste.

How would these facts affect the progress of the people?

Hinduism also teachs transmigration of souls where a person may be born again in a higher or lower form of life as he has lived worthily or unworthily.

Would a people believing these things probably be a progressive people? Why?

Place Geography—Grade Six:

Countries—United States, Great Britain, Germany, France, India, Italy, Russia, Canada, Austria-Hungary, Japan, China, Brazil, Argentine, Netherlands, Mexico, Belgium, Australia, Spain, Sweden, Egypt, Turkey.

Cities—Calcutta, Colon, Constantinople, Damascus, Havana, Hongkong, Honolulu, Ottawa, Panama, Tokyo, Vladivostok.

Seas, Gulfs—Caribbean, Panama.

Islands—Borneo, Java, Madagascar, New Guinea, Sumatra, New Zealand.

Straits and Channels—Gibraltar, Mozambique, Suez Canal, Yucatan.

Capes—Good Hope, Horn, Guardafui.

Plateaus—Abyssinia, Bolivia.

Plains—Llanos, Pampas, Selvas.

Mountains—Andes, Austrian Alps, Brazilian.

Deserts—Australian, Great Sahara.

Lakes—Nyanza, Titicaca, Victoria.

Rivers—Amazon, Congo, LaPlata, Niger, Nile, Orinoco.

List of fifty most important foreign cities in order of rank:

1. Paris
2. London
3. Berlin
4. Vienna
5. Rome
6. Moscow
7. Constantinople
8. Petrograd
9. Tokio
10. Peking
11. Brussels
12. Manchester
13. Versailles
14. Athens
15. Budapest
16. Warsaw
17. Shanghai
18. Liverpool
19. Hamburg
20. Madrid
21. Smyrna
22. Munich
23. Dublin
24. Buenos Aires
25. The Hague
26. Bagdad
27. Milan
28. Mexico City
29. Geneva
30. Leipsig
31. Genoa
32. Toronto
33. Copenhagen
34. Vilna
35. Prague
36. Venice
37. Glasgow
38. Belfast
39. Stockholm
40. Vladivostok
41. Frankfort
42. Angora
43. Mosul
44. Jerusalem
45. Riga
46. Montreal
47. Singapore
48. Hongkong
49. Barcelona
50. Calcutta

The first thirty countries of the world in order of importance.

1. United States
2. France
3. Germany
4. China
5. Great Britain
6. Russia
7. Japan
8. Italy
9. India
10. Turkey
11. Canada
12. Poland
13. Egypt
14. Greece
15. Spain
16. Belgium
17. Ireland
18. Mexico
19. Rumania
20. Hungary
21. Austria
22. Czecho-Slovakia
23. Australia
24. Netherlands
25. Jugoslavia
26. Bulgaria
27. Switzerland
28. Persia
29. Brazil
30. Sweden

The twenty rivers of greatest importance in order of rank:

1. Rhine
2. Nile
3. Danube
4. Mississippi
5. Hudson
6. Volga
7. Euphrates
8. Yangste
9. Saar
10. Jordan
11. Thames
12. Tigris
13. Scheldt
14. St. Lawrence
15. Amazon
16. Congo
17. Somme
18. Colorado
19. Clyde
20. Amur

The ten most important mountains in order of rank:

1. Alps
2. Caucasus
3. Rocky
4. Ural
5. Carpathian
6. Andes
7. Everest
8. Appalachian
9. Himalaya
10. Mt. Blanc

The twenty-five most important bodies of water in order of rank:

1. Pacific Ocean
2. Atlantic
3. Mediterranean
4. Dardanelles
5. Black Sea
6. Adriatic
7. Baltic
8. Arctic
9. Bosphorus
10. Suez Canal
11. Panama Canal
12. Great Lakes
13. North Sea
14. Caribbean Sea
15. "The Straits"
16. Aegean Sea
17. Red Sea
18. Kiel Canal
19. Niagara Falls
20. Caspian Sea
21. Persian Gulf
22. Hudson Bay
23. Indian Ocean
24. Lake Superior
25. Gulf of Finland

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Some Aspects of Rural Japan—September, 1922.
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The Magic Beauty of Snow and Dew—January, 1923.
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OUTLINE

OF

HISTORY AND CIVICS

HISTORY AND CIVICS

Grade I—VI

In making the History Outline for Grades I to VI, the Courses of Study for the Duluth Schools and for the Cleveland Schools were consulted and largely used. We are also indebted to these courses for the Bibliographies.

*The Civics Outline is from the Scale for Measuring the Importance of Habits of Good Citizenship as suggested in Teachers' College Bulletin for January, 1921.

Grades I, II and III

Home, Community, Primitive Life, Public Holidays, Children of Other Lands, World Heroes.

Aims:

1. To awaken an intelligent interest in the important factors of the social environment of the child.
2. To organize and enrich his daily experiences.
3. To lead him to appreciate the labors of others and to understand the products made by their labors.
4. To give an impression of primitive life and of how progress has made better living conditions possible.
5. To create a respect for the historical background out of which our public holidays have grown.
6. To give a sympathetic knowledge of children of other lands.
7. To stimulate the growth of ideals through the study of individual heroes.

Method:

1. Stories read by children in easy reference books, or stories read and told by the teacher.
2. Dramatization of short stories or simple scenes.
3. Collections of pictures or objects.
4. Constructive hand work.
5. The development of projects.

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*In the teaching of civics "A Scale of Measuring the Importance of Habits of Good Citizenship" published in Teachers College Bulletin, January 1, 1921, pp. 36-40. Price 50c.

I. The Home and Community:

1. Food Supply.
2. Work of the Farmer.
3. Preparation for Winter's Food.
4. How do Animals prepare for Winter?
5. The Market and Grocery Store.
6. Clothing and Shelter.
7. Types of Houses.
8. Community Conveniences, such as paving, sidewalks, lights, water, mail boxes. How provided?
9. Public Parks and Playgrounds.
10. Public Buildings, such as churches, schools and so forth.
11. Fire and Police Protection, Street Cleaning.
12. Modes of Transportation—street cars, automobiles, trains. Compare with primitive times.

II. Holidays:

1. Columbus Day, stories of boyhood of Columbus, simple history of voyage, pictures.
2. Thanksgiving, its historical background, pictures, stories.
3. Christmas, opportunity to use many different projects.
4. Washington's Birthday, pictures, stories, colonial history simply portrayed.
5. Lincoln's Birthday, pioneer history, pictures, stories.
6. Memorial Day.

III. Primitive Life:

1. The Indian:
   a. Connect with early discoveries and Pilgrims.
   b. Childhood of Hiawatha.
   c. Legends of Red Children.
   d. Pictures and stories of Indian life.
   e. Indian Collections.
2. Cave, Cliff and Tree Dwellers:
   a. How they lived, food, shelter.
   b. Pictures of the remains of Cliff Dwellers homes.

IV. Children of Other Lands:

1. Their manners, customs, dress, holidays. Illustrate by pictures and stories.
2. Correlate where possible. For instance the Italian child may be studied in connection with the story of Columbus,

the African child with the story of Lincoln; the Dutch child with the story of the Pilgrims. Or, in the study of industries, as Silk—the Chinese child; Fur—the Eskimo child; Rubber—the African or South American child; Cotton Raising—the American Negro; and so forth.

V. World Heroes:

Old World history may be briefly brought within the comprehension of the third grade children by the stories of heroes selected with reference to their geography study as Joan of Arc, Lafayette, King Alfred, Robert Bruce, The Hero of Haarlem, William Tell, Arnold Winkelried, Marco Polo, and so forth.

Suggested Projects:

1. Make an excursion to the market or grocery preparatory to constructing a model store.
2. Build and furnish a doll's house.
3. Stories of farm life preparatory to making a farm on sand table.
4. Dramatize or pantomime farm activities.
5. Cut or model animals, fruits and vegetables incident to Thanksgiving.

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Krackowizer: Projects in the Primary Grades.
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Herbertson: Man and His Work.
Jenks: The Fireman.
Manly: Harvest Home of the Indians.
Clodd: Childhood of the World.
Eastman: Indian Boyhood.
Bangs: Jeanne d'Arc.
Dutton: Little Stories of France.
Guerber: Story of the English.
Johannot: Stories of Other Lands.
Mabie: Heroines Every Child Should Know.
Mabie: Heroes Every Child Should Know.

Pitman: Stories of Old France.
Tappan: Old World Hero Stories.
Warren: Stories from English History.
Baldwin: Fifty Famous Stories.
Coe: Founders of Our Country.
Coffin: Old Times in the Colonies.
Pumphrey: Pilgrim Stories.
Wright: Children's Stories in American History.
Finnemore: Peeps at Many Lands.
Scudder: Book of Legends.
Carpenter: How the World is Clothed.
Carpenter: How the World is Fed.
Carpenter: How the World is Housed.
Chamberlains: How We are Clothed.
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Chamberlains: How We Travel.
Hall: Weavers and Other Workers.
Mason: Origin of Inventions.
Chapman: History of Colorado.

Pupils' References:

Austin: Collection of Kindergarten Stories.
Dopp: Tree Dwellers; Early Cave Men; Later Cave Men.
McIntyre: The Cave Boy.
Half a Hundred Stories told by Half a Hundred Persons.
Tanner: Legends of the Red Men.
Bayless: Lolami, the Little Cliff Dweller.
Jewett: Hopi, the Cliff Dweller.
Nida: Ab, the Cave Man.
Wilson: Myths of the Red Children.
Jenks: Childhood of Ji-shib, the Ojibua.
Brooks: Stories of the Red Children.

HISTORY AND CIVICS

Grade IV

Early History of Colorado, Study of community Pueblo given as type. Early American History, Holidays.

Aims:

1. To show reasons for the settlement of new territory.
2. To show reasons for the beginnings of a city.

3. To show how natural features decide the location of a city.
4. To give a knowledge of how to image a landscape instead of a map.
5. To lead the child to see conditions existing in Colorado long ago.
6. To study some of the industrial and civic institutions of today.
7. To give pupils an introductory view into our nation's history.

Method:

1. Visual instruction by means of many pictures since pictures often tell a child more than the printed page. Lantern slides and stereographs should be used when available.
2. Dramatization of simple scenes.
3. Reading of simple history stories by children.
4. Stories told by teacher.
5. Each child make an individual history book, containing pictures, maps, and stories.

I. Colorado:

1. Review the study of Indian life. What tribes occupied this territory? Struggle with whites for occupation. Indian remains, Reservations.
2. Detailed study of Cliff Dwellers, Pictures, Indian collections, Legends.
3. First white settlers, reasons for coming.
4. Discovery of gold.
5. Location of first mining camps. Study of minerals found here. Mineral collections.
6. Reasons for growth of cities and their location.
7. Scenic features—mountains, locate chief ranges and highest peaks, glaciers, lakes, mesas, national parks.
8. Health resorts.

II. Pueblo as a type:

Origin of name. Trading post. Reasons for growth. Early pioneers.

The Steel Plant. Other Industries.

Suggested Projects:

1. Make a mine on the sand table.
2. Relief map of Colorado on the sand table.
3. Make a detailed study of the Steel Plant and make a collection of its smaller products.
4. Make a book of Colorado.
5. Compare our modes of travel with those of the pioneer. Construct a covered wagon.
6. Why was a trading post located on present site of Pueblo.
7. Make a book of Pueblo.

III. Holidays:

See Grades 1, 2, and 3.

IV. Early American History:

1. Discoveries and Explorations:
   a. Conditions leading to discovery of America.
      (1) Attraction of far East.
      (2) Marco Polo's book.
   b. How the Spaniards found our Continent.

      Columbus: The great discoverer.
      Boyhood and early training.
      Marco Polo's influence.
      Knowledge of geography of world.
      Struggle to gain aid.
      Voyages and discoveries.
      Importance of discoveries.

      Cortez: What he and his men saw in Mexico. How the natives lived, their cities and temples, their treasures of gold and silver. Why were the Aztecs afraid of the Spaniards?

      Pizarro: Why was he eager to visit Peru? What did he find there. Treatment of Incas.

      Ponce De Leon: Object of quest. Landing at Florida. Explorations.

      De Soto: Why did he come to America. Struggles with hunger, disease and Indians. Discovery of Mississippi.

      Magellan: Carried the flag of Spain around the world; the most wonderful voyage in history. Trace on globe. Compare length of voyage with one now.

Spain was the first nation to send pioneers to make homes in the New World. They brought with them horses, cattle, sheep and the seeds of vegetables, fruits and sugar cane. They explored Gulf states, lower Mississippi valley and the great Southwest as far north as Colorado.

c. How the English found America:

John Cabot: Find Labrador on globe. Why did he think this was China.

Sir Francis Drake: Why did English and Spanish sailors not like each other? Tell story of capture of Spanish treasure ships. Knighted by Queen Elizabeth.

Sir Walter Raleigh: His attempt to found colony. The wild turkey, the white potato and Indian corn taken back to England.

d. How the French came to America:

Jacques Cartier: His exploration of St. Lawrence.

Champlain: Founding of Quebec. How the French made friends with the Indians.

e. How the Dutch found America:

Henry Hudson and the Half Moon. Discovery of Hudson river.

Suggested Projects:

1. Dramatization of Columbus seeking aid.
2. Why do we call the voyage of Magellan wonderful?
3. Why were the Spanish Conquerors cruel to the natives?
4. Why did the English hate Spain?
5. Make a poster showing fight between Drake's ship and the Spanish treasure ship.
6. Dramatize Raleigh's appearance before Queen Elizabeth after he made his first settlement.

2. Early Days in the Colonies:

Virginian Life:

John Smith, the leader.
Purpose of colonization.
Character of colonists.
Relation with Indians.
Growth.

New England:
- The Pilgrims and their previous wanderings.
- The Mayflower.
- The first winter.
- Relations with Indians.
- Coming of Puritans.
- Leaders.
- Settlement at Salem.
- Help from Pilgrims.

New York:
- Place of settlement.
- Peter Stuyvesant.
- Reasons for coming.
- Homes and forts.
- Patrons.

Pennsylvania:
- Manners, customs, and religious beliefs of the Quakers.
- William Penn, how he received grant of land.
- Relations with Indians.

Georgia:
- Conditions in England.
- Interest of Oglethorpe in debtors.
- Purpose of settlement.
- Trade with Indians.
- Raising of silk worms.

Industries in early colonial days:

New England:
- Manufacturing—rum barrel staves.
- Trade with West Indies.
- Fishing.

The South:
- Agriculture—tobacco raising and cotton growing.

New York:
- Farming.
- Trade in furs.

Manners and Customs in Colonies:
- Slavery in South; other forms of service in the colonies.
- Education—North and South.
- Religion—The Puritan Sabbath.

Suggested Projects:

Why did Englishmen wish to make homes in America? Compare colonies. Why could John Smith help the colonists better after he had lived with the Indians?

Make a poster or show on the sand table the cabins and forts of the Pilgrims.

Dramatize the first Thanksgiving.

Learn "The Landing of the Pilgrims."

Portray the home life of the Puritans. How were the homes heated, lighted, supplied with water? How did the Puritan mother cook?

Learn about the fur trade in New York.

Portray a Dutch home, their dress, amusements and so forth.

Dramatize Penn's treaty with the Indians.

Bibliography

Teacher's References:

Report of the Committee of Eight.
Seventh and Eighth Grade Texts.
Eggleston: Our First Century.
Bassett: Short History of the United States.
Hart: Contemporaries.
Hart: Source Book.
Dunn: The Community and the Citizen.
Hough: The Development of Illuminations.
Kellogg: How to Celebrate Thanksgiving and Christmas.
Nida: City, State, and Nation.
Soper: Modern Methods of Street-Cleaning.
Craig's Brief History of Colorado.

Pupils' References:

Foote & Skinner: Explorers and Founders of America.
Foreman: First Lessons in American History.
Gordy: American Leaders and Heroes.
Montgomery: The Beginner's American History.
Pratt: The Early Colonies.
Tappan: American Hero Stories.
Tappan: Colonial Letters.
Whitney & Perry: Four American Indians.
Perry & Price: American History, I.
Coe: Founders of Our Country.
Barstow: Explorers and Settlers.

Guerber: Story of the Thirteen Colonies.
Coffin: Old Times in the Colonies.
Fanner: Legends of the Red Men.
Hill: Fighting a Fire.
Jewett: Town and City.
Judd: Wigwam Stories.
Baldwin: Four Great Americans.
Baldwin: Discovery of the Old Northwest.
Beard & Bagley: A First Book in American History.
Blaisdell: Story of American History.
Coe: Founders of Our Country.
Earle: Child Life in New England.
Gordy: Stories of Early American History.
Hart: Colonial Children.
Hill: Lessons for Junior Children.
McMasters: Primary History.
McMurry: Pioneers of the Mississippi Valley.
McMurry: Pioneers on Land and Sea.
Mace: Beginners' History.
Scudder: George Washington.
Southworth: Builders of Our Country.

Grade V

Later American History

Aims:

1. To carry on the story of the country's growth and expansion.
2. To make the story of events concrete, dramatic and life-like by centering them about leaders, heroes and other representative men, in such a way as to appeal to the imagination and to influence the ideals of the pupil.
3. To select the facts and events so carefully that the spirit of our national life and institutions may be presented.

Method:

1. Text and reference books in hands of pupils.
2. Emphasis placed on clear visualization of stories.
3. Occasional dramatization.
4. Visual instruction.
5. Constructive work to illustrate objects of interest.
6. Two-minute talks by pupils.
7. A history book to be made by each pupil.

I. Later American History:

1. Revolutionary Days.
2. The New Republic.
3. Expansion—Development.
4. The Civil War.
5. The World War.

In each period there should be a study of great men, invention, industries and their effect on the history and development of the times.

Suggested Projects:

1. Keep a reference list of important dates.
2. Collect (Perry) pictures of great men and places of period studies.
3. Write a composition describing the social life in time of Washington.
4. What effect did the invention of the cotton gin have upon slavery.
5. Make maps showing growth of territory.
6. Pretend you are a forty-niner and describe trip to California.
7. Model a sand table—the battle of Gettysburg.
8. Impersonate some Civil War hero and describe some events in his life.
9. Collect pictures to illustrate the great industries.
10. Make or collect pictures of a submarine, the Lusitania, a Yankee soldier, a French soldier, a Highlander, a Red Cross nurse.
11. Describe how the people at home helped win the war.
12. Impersonate a Doughboy and describe his experience in going overseas.

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Teachers' References:

Bourne & Benton's America and Great Americans.
Sparks: Men Who Made the Nation.
Bachman: Great Inventors and Their Inventions.
Channing: History of the United States.
Bassett: Short History of the United States.
Scudder: Life of George Washington.
Elementary School Journal, 1917, Vol. XVII.

The Study of History in the Elementary Schools. (Report of the Committee of Eight.) (1909)
Johnson: Teaching of History.

Pupils' References:

Forman: First Lessons in American History.
Gordy: Stories of Later American History.
Mowry: First Steps in the History of Our Country.
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Faris: Real Stories from Our History.
Tappan: Our County's Story.
Tappan: American Hero Stories.
Gordy: American Leaders and Heroes.
Southworth: Builders of Our Country, Vol. II.
Dickson: A Hundred Years of Warfare.
Hart: Source Book of American History.
Hart: Camps and Firesides of the Revolution.
Pratt: American's Story, Vol. V.
Pratt: American History Stories.
Pratt: Foundations of the Republic.
Guerber: Story of the Great Republic.
Tomlinson: War of 1812.
Eggleston: First Book in American History.
Coe: Makers of the Nation.
Whitney & Percy: Four American Indians.
Baldwin: Four Great Americans.
Blaisdell & Ball: Hero Stories.
Coffin: Boys of '76.
Lefferts: American Leaders.
Mace: Beginners' History.

Instructive and simple books on civics for children are listed below:

Dole: The Young Citizen.
Hill: Lessons for Junior Citizens.
Jewett: Town and City.
Richman: Good Citizenship.
Fryer: Our Home and Personal Duty.
Fryer: Our Town and Civic Duty.
Fryer: Community Interests and Public Spirit.

Additional books and poems which might be used as supplementary in the history or in the literature hour:

Barstow: The Colonists and the Revolution, a New Nation. The Westward Movement, The Civil War, The Progress of a United People.

Brigham: From Trail to Railway.

Thwaites: Daniel Boone.

Otis: Benjamin of Ohio.

Dickson: Pioneers and Patriots in Early American History.

Duncan: Brave Deeds of the Revolutionary Soldiers.

True Stories of Great Americans: Lee, John Paul Jones, Washington, Franklin, Nathan Hale, Fulton, Crockett, U. S. Grant.

Read: Sheridan's Ride.

Whitman: O Captain, My Captain!

Bryant: Song of Marion's Men.

Finch: Nathan Hale.

Holmes: Old Ironsides.

Emerson: Lexington.

Webster: Bunker Hill.

Longfellow: Paul Revere's Ride.

Holmes: Grandmother's Story of Bunker Hill.

Grade VI

Old World Background to Our Civilization

Aims:

1. To show that American everyday ways of living began long ago in the old nations of the world.
2. To emphasize the idea that European nations have been the teachers and the helpers of the American nation.
3. Ideas of the making of the English nation; life in the Middle Ages; The Europe which found America; how the English began a new nation in America.

Method:

1. Definite assignment indicating references.
2. Visual instruction.
3. Dramatization.
4. Talks by pupils in good English.
5. An individual History book with cover design relating to period and containing descriptions, stories, and illustrations collected by owner.

I. Our Debt to Ancient Nations.

1. The Egyptians.
2. The Phoenicians.
3. The Hebrews.

II. The Greeks:

1. Greek Heroes.
2. How the Greeks saved freedom.
3. Greek writers, builders and artists.

III. The Romans:

1. Founding of Rome.
2. What the Romans learned from the Greeks.
3. The Romans conquer the West.
4. What they did for Britain.
5. What they did for the World.
6. Fall of Roman Empire.

IV. The Spread of Christianity:

1. Effect of German Invasion.
2. Charlemagne, the hero of Middle Ages.
3. Mingling of Romans and Germans tribes gave rise to Modern Nations of Western Europe.

Suggested Projects:

1. Make a map of Mediterranean region to show where ancient peoples lived.
2. Illustrate on poster the steps in the invention of alphabet.
3. Dramatize the story of Joseph and his brothers.
4. Compare the time covered by United States history with time covered by Egyptian history.
5. Make a poster of inventions that helped discover America.
6. Why did Greece produce so many really great men.
7. Impersonation of famous Greek men. Have class guess names.
8. Compare Demosthenes with Webster.
9. Collect pictures of Greek Architecture.
10. Give a program in Greek art and Greek sports.
11. Compare Athens and Sparta.
12. Compare Pericles with Lincoln as wise statesman.
13. Compare a Greek colony with the Virginia or Massachusetts colony.
14. Make a model of Rome in the sand table.

15. Try to write with a stick or wax. Trace development of writing.
16. Why was the word Hun applied to the Germans in the World War.

V. The Making of the English Nation:

1. How England began.
2. King Alfred the Great.
3. The coming of the Normans.
4. Normans are masters in England.
5. How the English began to win their liberties.
6. King John and the Great Charter.

VI. Life in England and Europe during the Middle Ages:

1. Feudalism: Lord, Castle, Knight.
2. Life of the Common people.
3. Life in the towns.
4. Religious life and institutions. Growth of the church, monasteries, work of the monks.
5. The Crusades:
   Conditions leading to the Crusades.
   Typical crusades and crusaders.
   Results of Crusades.
6. The Europe which found America:
   How the World learned to read.
   Invention of compass.
   Traveling and trade lead to exploration and discovery.
   New ideas brought to Europe.
   Story of Marco Polo.
   Portugal first nation to find new way to India.
   Spain shares in discoveries.
   England joins in discoveries.

VII. How the English began a new nation in America:

1. In the days of Queen Elizabeth.
2. Life in the New World.

Suggested Projects:

1. How do guilds differ from present day labor unions?
2. Write a story about a boy who lived in a castle or a village or a town.
3. Make a model of a castle and a village in a sand table.

4. Make a map to show the routes of the first and third crusade.
5. Why were the crusades a turning point in history.
6. Collect pictures of the crusades.
7. Compare the crusades with present day crusade: health, anti-tobacco, dry, clean-up and so forth.
8. Make a map to show the routes taken by Columbus and the other Spanish explorers.
9. How did England become the most powerful country in Europe.

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OUTLINE

OF

HYGIENE AND PHYSICAL CULTURE

HYGIENE AND PHYSICAL CULTURE

Grades One to Six

I. General directions:

1. Weigh children at regular intervals.
2. Have daily health drills and inspection.
3. Games and drills suitable for use in carrying out specific instructions found under each grade may be found in the books listed in the bibliography.
4. Use breathing exercises in all grades.
5. The greater part of physical education should consist of playing games properly supervised.
6. Write to the manufacturers of dental creams, tooth brushes, bathroom fixtures, and plumbing fixtures for posters and literature.
7. Make free use of memory gems and poems.
8. Dramatize health stories.

Grade One

Aim:

To inculcate health habits of posture, play, cleanliness, sleep, eating, and care of the body through talks, stories, poems, songs, games, and correlated activities.

Outline of Work

In addition to the outdoor recesses, a minimum of fifteen minutes per day should be devoted to physical activities; the time to be divided into periods of three to five minutes each and utilized for relief and posture drills. Ventilate the room before giving physical exercises.

I. Posture:

1. Give constant attention to correct posture in sitting, standing, running, and walking.
2. When pupils are sitting "in position" at their desks, let them rest their hands on the outer edges of their desks with a light grip instead of folding them in the middle of the desk top.
3. Use songs, poems, and stories such as are found in the books listed in the bibliography.
4. Posture tag is a type of game to play. It is played the

same as other tag games except that each child carries an eraser or other light weight object on his head. If the eraser falls from the head before the runner is tagged, a new player takes his place.

5. Use any soldier march to develop rhythm.

II. Cleanliness:

1. A daily inspection of each child.
2. Give informal talks on bathing.
3. Tell stories such as "The Pig Brother".
4. Model a bath tub and a wash basin from clay.
5. Cut soap advertisements from newspapers.
6. Make booklets illustrating cleanliness.
7. Model from clay the characters in such stories as "The Pig Brother".
8. Read and dramatize health stories found in the books listed in the bibliography and elsewhere.
9. Have a demonstration of hand washing and proper drying.
10. Show why hands should be washed and nails cleaned before eating.
11. Distribute samples of soap obtained from leading soap companies.

III. Play:

1. Story plays:

Explain a story play. After it is understood by the children, always use the same form for the play, a well-memorized story play can be directed by a short statement for each activity and should take from one to five minutes to give.

A. Example: "The Cowboy."
   a. Swinging lasso.
   b. Ponies gallop to fair.
   c. Shooting balls.
   d. Balance on pony.
   e. Gallop home, swinging lasso.
   f. Resting at home.

2. Imitation plays:
   a. Such as imitating flying birds by means of light, running steps.
3. Singing games:
   a. Such as "Farmer in the Dell."

IV. Health habits:
1. Use of handkerchief.
2. Care of teeth:
   a. Toothbrush drill.
3. Sleep:
   a. Make sleep posters.
   b. Talk on rest.
4. Eyes and ears:
   a. Emphasize cleanliness and care.
5. Mouth and nose:
   a. Mouth for food and drink only.
   b. Breathe through the nose.

V. Clothing:
1. Make freehand cutting of clean clothes and clothes line.
2. Make Dutch doll. Emphasize cleanliness of Dutch.

VI. Foods.
1. Importance of milk.
2. Drinking water:
   a. Fold drinking cups. Emphasize use of individual drinking cups.
   b. Necessity for drinking proper amount of water.
3. Vegetables:
   a. Make vegetable booklet.
   b. Make drawings of common vegetables.
4. Fruits:
   a. Make fruit booklets.
5. Meals:
   a. Make posters of proper breakfasts, lunches, and dinners.
6. Candy:
   a. Teach moderation in its use.

VII. Safety first:
1. Discuss common dangers such as running with sticks, throwing rocks, cutting corners, etc.
2. Play traffic game.
3. What quarantine means.

VIII. Rest:
1. Rest periods:
   a. Permit children to lay heads on desks and close eyes for a few minutes.

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Dramatic Games and Dances for Little Children by Caroline Crawford.

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Grade Two

Aim:

To establish, through activities, personal health habits and moral and mental habits.

Outline of Work

Determine by inspection and questioning which health habits need most attention. Use stories freely.

I. Posture:

1. Marching:
   a. Watch each individual.
   b. Emphasize posture and rhythm. Give but little attention to formal commands.
   c. If possible, use music.
2. Make free use of relief and posture drills.

II. Personal health habits:
   1. Bathing:
      a. Talk about cleanliness of face, hands, neck, ears, hair.
      b. Use many suitable poems and stories.
   2. Care of nails:
      a. Make picture cutout of nail and scissors.
   3. Keeping fingers away from nose:
      a. Memory sentence—I will remember to use my handkerchief and to keep my nose clean.
   4. Clothing:
      a. Wear clean clothes.
      b. Add outer clothing when going out of doors.
      c. Remove outer clothing on returning indoors.
      d. Memory sentence—I will try to look clean and neat.

III. Safety habits:
   1. Stop, look, listen at street crossings.
   2. Avoid playing with matches.

IV. Rest:
   1. Free exercise periods.
   2. Change games frequently so that different muscles get a chance to be used.
   3. Vary seat work.
   4. Rest with heads on desks.

V. Games:
   1. Such as "We are the Roman Soldiers," skipping rope, bouncing ball, tossing ball.

VI. Group habits:
   1. Care of floor.
   2. Care of school property.

VII. Foods:
   1. Why little children should not drink coffee and tea.
   2. Plan meals:
      a. Write menus.
      b. Community project—Posters showing proper foods and drinks.

VIII. Health plays (Dramatization).

IX. Continue relief drills of first grade.

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Grade Three

Aim:

By means of stories, plays, posters, poems and drills, to establish personal health habits necessary to the growth and health of the child.

Outline of Work

I. Breathing:

1. Talk about deep breathing.
2. Take chest measure and waist measure with lungs empty, then with lungs full.
3. Practice deep-breathing exercises.

II. Eating:
1. Need of eating regularly.
2. Bad habits—eating candy, etc., between meals.
3. Value of eating slowly and chewing food well.
4. Using pictures cut from old magazines, make scrap books illustrating "A Good Breakfast," "A Good Dinner," "A Good Lunch."

III. Foods:
1. Make booklet—laxative foods.
2. Make poster—cereals for breakfast.
3. Make a vegetable poster.
4. Use games wherever possible.
5. Compare food in body with burning of fuel.

IV. Care of six-year molars.

V. Table manners:
1. Have group of children demonstrate:
   a. Correct posture at table.
   b. Use of knife, fork, spoon.

VI. External organs of body:
1. Compare arms, fingers, limbs, feet with those of lower animals.
2. Value of exercise of these parts:
   a. Finger exercises.
   b. Simple calisthenics.
   c. bean-bag relay.
   d. Relief drills.

VII. Organs of special senses:
1. Eyes, ears, nose, tongue, nerves:
   a. Use and care.

VIII. Organs of circulation:
1. Heart and blood vessels:
   a. Makeup and work of heart.
   b. Veins and arteries as public highways.
   c. Lungs as transfer stations.

IX. Organs of respiration:
1. Nose, throat, lungs:
   a. Use of nose.
   b. Throat and tonsils.
   c. Lungs as air markets.

X. Organs of digestion:
   1. Teeth for chewing.
   2. Esophagus as a hall way.
   3. Stomach as a kitchen.
   4. Intestines as winding stairway.
   5. Relations of organs.

XI. Covering of body:
   1. Skin, hair, and nails:
      a. Uses, care, beauty.
      b. Make poster with title, "Wash Every Day; You Won't Shrink."
      c. How skin, hair, and nails tell tales.

XII. Colds:
   1. How colds are contracted.
   2. How colds are spread.
   3. How to avoid colds.

XIII. Safety first:
   1. Talk on fires:
      a. How to call fire department.
   2. Talk on signs commonly seen and their meaning.
   3. Illustrate different phases by means of posters.

XIV. Mental habits:
   1. Good mental habits necessary to health.
   2. Use poems, stories, and talks.

XV. First aid:
   1. For cuts and scratches.
   2. For nose bleed.
   3. For burns.
   4. For bruises and sprains.

XVI. Our friend the sun:
   1. Value of sunshine for plants and animals:
      a. Plant beans in two boxes. Put one in the sun and one in the shade.
      b. Health posters on "Sunshine."
      c. Play games in the sunshine.

XVII. Our enmies:
   1. Tea and coffee.
   2. Fly and mosquito.
      a. Campaign to kill flies.
      b. How mosquitoes spread disease and how they may be exterminated.

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Grade Four

Aim:

To lead the children to do the things they can do and ought to do for the sake of their own health and happiness.

Outline of Work

I. Home and school health chores.

II. School medicine cabinet:
   1. Medicines that clean wounds (Be sure to include pure soap).
   2. Bandages of different widths.
   3. Scissors.
   4. Small safety pins.

III. Health crusade:
   1. Plan a campaign of your own or send to National Tuberculosis Association, 370 7th Ave., New York City, for material concerning "Modern Health Crusades."

IV. Responsibility of child in schoolroom:
   1. Proper ventilation maintained by children.
   2. Inspection performed by children.

V. Care of injuries:
   1. Lesson plan.
      a. Aim—to familiarize child with care of minor injuries.
      b. Type—conversational.
      c. Introduction—pretense-injury (burn) of a pupil.
      d. Procedure:
         a. Keep burned part from air by covering with a mixture of baking soda and water.

b. If skin is blistered or broken through, use ointment.
c. If burn is severe or covers large area, send for doctor.

E. Conclusion—Pupil to administer first aid to another pupil who has a pretense burn.

2. Using plans similar to the above, show how to care for:
a. Frost bite.
b. Bee sting.
c. Snake bite.
d. Dog bite.
e. Sprain.
f. Bruise.
g. Minor cut.
h. Bleeding from artery.
i. Bleeding from vein.

VI. Lungs, adenoids, tonsils:
1. Breathing good air as compared with breathing bad air:
a. Ho wto keep air of school room moist.
2. As correlated with geography:
a. Moist air of low altitudes.
b. Dry air of high altitudes.
3. Smoke-filled city air.
4. Very simple explanation of anatomy and function of lungs and tonsils.
5. Dangers from adenoids.

VII. Disease:
1. Carriers of disease.
2. Prevention of contagious diseases.

VIII. Microbes:
1. Helpful bacteria as found in yeast, vinegar, etc.
2. Harmful ones:
a. How to protect the body from bacteria.
3. Experiment with foods.

IX. Hair:
1. Shampooing.
2. Brushing.

X. Nails:
1. Use.
2. Proper trimming and cleaning.

XI. Teeth:
1. Germ enemies.
2. Cleaning:
   a. Brush.
   b. Dental floss.

XII. Make bath posters and cleanliness booklets.

XIII. Have pupils prepare two-minute speeches to be given before lower grades.

XIV. Our friend, the sun:
1. How the sun helps the plants.
2. The sun as a friend of animals.
3. The sun and healthy children.
4. Play in the sunshine.
5. Experiment with plants.

XV. The heart and the blood:
1. Test beats while at rest.
2. Test beats after violent exercise.
3. Composition of blood:
   a. The liquid.
   b. The little red cells.
   c. The white warrior cells.
4. Importance of pure blood.

XVI. Supervised play (Out of doors as much as possible).

XVII. Emphasize posture in all drills. The value of these commands must not be forgotten: "Waists—In!"; "Toes—Forward!"; "Heads—Up!"; "Stand—Tall!".

Grade Five

Aim:

Knowledge of and practice in rules of hygiene. The use of physical education as a means of attaining a cheerful mind and an active body.

Outline of Work

I. Health chores:
1. Purpose:
   a. Physical and moral improvement.
   b. Combining home and school in health work.

2. Method:
   a. Tell stories such as King Arthur and His Knights.
   b. Correlate with other subjects such as reading, arithmetic, language, and nature study.

II. Posture:
1. Stories of great men who were always physically fit.
2. Observation of posture of different people.
3. Use games and exercises to develop, postural muscles, to strengthen arches of the feet. (See texts and helps listed in bibliography.)

III. Rest:
1. Reasons for being tired:
   a. Insufficient sleep.
   b. Lack of fresh air in sleeping room.
   c. Exhausted nervous system.
2. Value of rest and sleep.
   a. Encourage growth and strength.

IV. Supervised play:
1. For the fun of it.
2. To develop skill.
3. To secure fair play.
4. For correct posture.
5. To develop muscles and organs.
6. Examples of suitable games—all tag games, bean bag pass, last man, dodge ball, base ball, volley ball.

V. The skin:
1. Relation to colds.
2. Care of skin.
3. Effect of alcohol and tobacco on skin.

VI. Teeth:
1. Causes of decayed teeth and diseased gums.
2. Effect of decayed teeth and diseased gums.
3. Treatment of decayed teeth and diseased gums.
4. Use pictures and magazine clippings.
5. Number of teeth in first set and in permanent set.

VII. Heart:
1. Elementary study of anatomy of heart by use of pig's or calf's heart.
2. Effect of bad posture on heart.

3. Effect of alcohol and narcotics on heart.
4. How exercise effects the heart:
   a. Count the number of breaths a minute while sitting in school room. Then count them just after playing an active game.

VIII. Hair:

1. Caution about use of heavy oils and medicines.
2. Growth:
   a. Study hair under microscope.

IX. Eyes:

1. Elementary study of structure.
2. Effect of light on eyes:
   a. Artificial light.
   b. Daylight.
   c. Cross lights.
   d. Facing strong light.
3. Form proper habits of holding book at right distance from eyes and keeping head up when reading.

X. Ear:

1. Elementary study of structure.
2. How we hear.
3. Test hearing of each child.
4. Play games that use whispers and sounds made by changing position of body, dropping objects, etc.

XI. Food:

1. Preparation:
   a. Reasons for cooking certain foods.
   b. Ways of cooking foods.
2. Amount of food taken at one time.
3. Drill on table etiquette:
   a. At class picnics.
   b. At class parties.
   c. In dramatizing stories.

XII. Insects and diseases:

1. The fly:
   a. As a carrier of typhoid fever, tuberculosis, etc.
   b. How to destroy flies.
   c. How to keep flies away from food.

2. The mosquito:
   a. As a carrier of malaria and yellow fever.
   b. How to prevent development of mosquito.
   c. How to destroy mosquitoes.

XIII. Hiking and camping:
1. Advantages.
2. Outfits.
3. Clothing.
4. Methods of building a fire.
5. If possible, plan a real hike and take it.
6. Boy scout work.
7. Girl scout work.
8. Campfire work.

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(See bibliography for grade six).

Grade Six

Aim:

To enlarge upon the subjects taught throughout the first five elementary grades; to introduce some physiology and some community hygiene; to fix firmly in the lives of the pupils those ideals and habits which are conductive to health.

Outline of Work

I. Slogan for the year—Pure Air and Cleanliness.
1. Have clean-up campaign for school building and grounds.

II. Nervous system.
1. Parts:
   A. Cells.
   B. Fibers.
   C. Centers.
      a. Brain.
      b. Spinal cord.
      c. Ganglia.

2. Work:
   A. Nerves in relation to health habits.
   B. Hygienic treatment of nervous children in the school room.
      a. Physical exercise (out of doors whenever possible).
      b. Relaxation by change of subject matter.
   C. Fatigue and its effects:
      a. Poison produced by being tired and ways of eliminating it.
   D. Narcotics:
      a. Tobacco.
      b. Alcohol.
      c. Drugs such as opium:
         1. Lower resistance to disease.
         2. Effect mentality.
         3. Dull the responses to messages from the brain.

III. Muscular system:
   1. How muscles grow firm and strong:
      A. By exercise (out of doors whenever possible):
         a. Stimulates circulation of blood.
         b. Aids digestion.
         c. Increases body heat.
         d. Makes body graceful.
         e. Co-ordinates body and mind.
         f. Types of exercise:
            1. Daily dozen (Timed by music, if possible).
            2. Correction exercises such as are used in the army and navy.
            3. Any active game suited to the age and physical condition of the child. (See games found in books listed in bibliography).
      B. Good food:
         a. Types which aid in muscle growth:
            1. Milk.
            2. Vegetables such as peas, grains, beans, lentils.
            3. Carbohydrates.
   2. Training muscles to skill:
      A. Value:
         a. Overcome awkwardness.
         b. Become efficient workmen.
         c. Develop strength.

B. What muscles to train:
   a. Those which will develop skill in speech, posture work, games, observation.

C. How to train for skill:
   a. Constant practice.
   b. Avoidance of overfatigue.
      1. Care of fatigued muscles by means of massage and bathing.
   c. Formation of muscle habits.
      1. Posture:
         (1) Head up.
         (2) Chin up.
         (3) Waist in.
      2. Walking with firm, even steps.
      3. Facial experssion:
         (1) Smile instead of frown.
         (2) Avoid twitching facial muscles.
      4. Speech:
         (1) Speak clearly.
      5. Graceful carriage:
         (1) Swim, play ball, play tennis, wrestle, skate, row, etc.

IV. Accidents and emergencies:
1. Wounds:
   A. Bruises.
   B. Cuts.

2. Snake bites:
   A. Treatment (Especially of the ones such as the rattler found in our own state).

3. Poisons:
   A. What to do:
      a. Call a doctor.
      b. Give emetic.
      c. Give antidote (Remember that vinegar is an antidote for alkaline poison and baking soda for acid poison).
   B. Some kinds of poisons found in our homes:
      a. Matches, arsenic, strychnine, lye.

C. Poisonous plants:
a. Ivy:
1. How to avoid:
(1) Study the plant, if obtainable.
2. Swamp sumac.
3. Poisonous oak.

4. Fainting:
A. Cause—lack of blood to brain.
B. Treatment:
a. Place patient in fresh air with head lower than body.
b. Loosen clothing.
c. Use cold water.
d. Rub limbs toward body.

5. Sunstroke:
A. Cause—excessive heat from sun.
B. Treatment:
a. Reduce temperature.
b. Send for doctor.
c. Loosen and remove outer garments.
d. Use *no* stimulants.

6. Drowning:
A. Administer first aid to get breathing and circulation started again.

7. Clothing on fire:
A. Smother flames with blankets or rugs or by rolling patient on floor.

8. Bleeding at nose:
A. Keep head erect.
B. Apply cold cloth to back of neck and to bridge of nose.

9. Broken bones:
A. Get patient to doctor as quickly as possible.

10. Sprains:
A. Bandage quickly.
B. Call doctor or take patient to doctor at once.

V. Safety first:
1. Requisites:
A. Cool head.

B. Clear thinking.
C. First-aid knowledge.
D. Prompt action.

2. Traffic rules:
   A. Obtain copy of rules and carry them out by appointing class officer for such duty.
   B. Make posters of
      a. Cars racing trains.
      b. People jay-walking corners.
      c. Catching rides on freight trains.
      d. Accidents caused by street cars.
      e. Cars passing other cars on curves.
      f. Children playing in middle of street.
   C. Narcotics and safety first:
      a. Effect of tobacco and alcohol on nerves of engineers and chauffeurs.
      b. Why aviation requires clean men with steady nerves.
   D. Handling of fire arms:
      a. Practice correct position for carrying guns.
      b. Rules for handling of guns.
   E. Fires:
      a. Definite safe rules for handling bonfires:
         1. Choose a time when there is no wind blowing.
         2. Choose a place at a distance from all buildings.
         3. Stay by fire until it is out. (This is the time and place to demonstrate how to wrap body to put out flames.)
   F. Explosions:
      a. Danger of starting fires with kerosene.
   G. Bravery vs. foolhardiness:
      a. Medal for bravery.

VI. Dangerous animals:
   1. Flies:
      A. Life history:
         a. Hatch from eggs laid in decaying refuse heaps.
         b. Eggs become maggots.
         c. Filth promotes rapid growth. Maggot turns to pupa and later to full-grown fly.

B. Ways of combating:
   a. Remove filth.
   b. Use screens.
   c. Practice cleanliness.

C. Diseases spread by flies:
   a. Typhoid, tuberculosis, intestinal diseases.
   b. How spread:
      1. Carelessness in placing covers on dishes.
      2. Carelessness in sick room.

D. Plan clean-up campaign.

2. Mosquitoes:

A. Life history:
   a. Hatch from eggs laid in stagnant water.
   b. Wigglers are second stage of life cycle. They soon turn to mosquitoes.

B. Breeding places:
   a. In undesirable water bodies with no outlet, rain barrels, swamps and other places.

C. Kinds:
   a. Diseases-carrying type.
   b. Harmless, but stinging type.

D. Ways of combating:
   a. Drain breeding places.
   b. Pour oil upon surface of water.

VII. Bones:

1. Bone-building foods:

A. Milk, eggs, cauliflower, spinach, whole wheat bread, turnips, cereals.

2. Posture:

A. Value of correct posture.
B. Causes of deformities.

3. Joints:

A. Kinds.

4. Repair of broken bones:

VIII. Teeth:

1. Removal of temporary teeth.
2. Permanent teeth.
3. Wisdom teeth.
4. Exercise of teeth:
   A. Eat some hard food at each meal.
5. Care of enamel.
6. Cleaning teeth.
7. Bad habits:
   A. Putting fingers in mouth.
   B. Holding foreign substances between teeth.

IX. Nutrition:

1. Nutrition involves:
   A. Formation and practice of health habits.
   B. Acquisition of knowledge necessary to health.
   C. Development of right attitudes and ideals with regard to mental and physical health.
2. Use of milk, vegetables and fruit as food.

X. The foot:

1. Its work—to carry gracefully the entire weight of the body.
2. Foot ailments:
   A. Flat feet and broken arches:
      a. Causes.
      b. Remedies.
   B. Corns and bunions:
      a. Causes.
      b. Remedies.

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OUTLINE

OF

HUMANE EDUCATION

HUMANE EDUCATION

It is hard to condense into narrow limits a course on Humane Education because the subject is so vast. It covers the whole subject of moral education, of our proper conduct toward all the living creatures of the earth, and is the most important of all things to be taught because good conduct is fundamental to our own happiness and success and to that of the rest of the living world. Almost all the preventable suffering in the world can be traced back to somebody's bad conduct.

All we can do here is to state the main, simple principles and facts and leave their application mostly to the teacher. We ask them to realize its importance and the lifelong influence its proper teaching will have on their pupils. We ask them to use their utmost ingenuity and devotion in trying to make it a living, interesting part of their pupils' every day lives and thoughts.

First Year:

Hardly anybody realizes how dependent we are on dumb animals: We should have no civilization as we know it now, for instance, if it had not been for the help of horses. They bring the doctor when we come—they draw the hearse when we go, and all the way between almost everything we have we owe in some way partly to their help. In other ways and in less degree we depend on all domestic animals and even on the wild creatures. It is true of fishes, of insects and reptiles and of dumb animals commonly regarded as injurious or dangerous—when we know the whole truth it will be found that every creature has its uses by which man as the highest in some way profits.

What horses do for us: On the farm they plow, harrow and sow; they haul crops to the barn and to market; they draw wagons and carriages, we ride them. We could not raise crops without them, could not handle anything bulky or heavy, could not go from one place to distant ones, could not even live without going back to savagery. In war they haul supplies, ammunition and artillery, carry soldiers as cavalry, messengers and couriers, are wounded and die just as men do. In the woods they haul logs, timbers and supplies. In shipbuilding they haul supplies for the men, draw materials, haul the original logs of which timbers, planks, masts and spars are made. On cattle ranches they carry herders and cowboys, help to herd cattle and hold them, haul supplies for the men, materials of all sorts needed, hay and sup-

plies for stock. In town they haul heavy and bulky materials of every kind, merchandise, stone, coal and other freight, are ridden for pleasure and for business. Whenever great strength, intelligence and obedience are required they serve us in life, and in death their hides, bones and flesh are still useful.

In class let the children tell stories of horses they know or have heard of, make drawings of horses in various uses, guess at what we should do in each case where we use horses if we did not have them. It is understood, of course, that what is said here includes mules, donkeys and burros as far as it applies to their uses.

What cattle do for us: The flesh of all cattle is good for food, their hides for leather, their horns and bones for manufactured articles. Cows give us milk, the most universal and best food, indispensable for children and even for adults. There are inferior substitutes for butter and cheese but none for milk.

In class let the children tell stories about cows and other cattle, tell in how many ways milk is used and about making cheese and butter, and in how many ways leather.

What dogs and cats do for us: Dogs guard our homes, watch our little children, herd sheep and cattle, help us in hunting, track and help to catch criminals. But their chief use is as friends and companions. They teach us what courage, loyalty, gratitude, sympathy, love, friendship and devotion mean as few humans can teach those things because few humans are so full of them. What a mean, cowardly and cruel thing to abuse a dog! Anybody who can do it is a dangerous person. He will abuse anybody else if he thinks it is safe. Cats are playmates, they destroy small vermin, they amuse and entertain us, and are company for us. It is a wicked thing to abuse them.

What sheep do for us: Their flesh is good for food, their fleece for clothing. No other meat in some ways is as good and no other substance can take the place of wool. Goats, in addition, give a very valuable milk which can be used sometimes when cow's milk cannot be used.

What pigs do for us: Their flesh is good for food—almost indispensable, many persons think. Bacon and pork in other forms are used around the world.

What chickens, ducks and geese do for us: They give us food, in their flesh and eggs and give us feathers, too. The statistics of poultry and egg consumption are almost beyond belief.

What wild birds do for us: It is stated on the best authority that if birds did not keep down insects in a little while not a living green thing could be found on earth. That would mean that mankind would vanish at the same time. Whenever an insect eating bird is killed all of us have lost a good friend, who works for us all the time. Fruit growers sometimes say a few birds in the orchard are worth as much as a hired man. Game birds furnish food and song birds sing for us. The woods and fields would be lonely and silent if it were not for their songs.

Wild animals of all kinds were once useful and nearly all of them still are useful. Nearly all beasts of prey aid in keeping down the numbers of the animals they live on. Bears, wolves, lynx, foxes and all such animals were necessary once and some of them are still necessary. For example, coyotes, which are a kind of prairie wolf, live mostly on rabbits. If there were no coyotes, rabbits would soon over-run the plains and eat up almost every living green thing. Nearly all hawks and owls are useful in the same way and do far more good than harm.

About many dumb animals we know little or nothing, so little we do not even know of what use they are to us. That is especially true of insects, bugs, worms, snakes and other reptiles. We know a little about some of them—angle worms are useful in breaking up the earth so vegetation will grow, toads keep down destructive bugs and other insects in the garden and field. Lady bugs are raised by hundreds of thousands to keep down certain kinds of lice destructive to plants. Everybody knows about bees and honey—hundreds of books have been written about them. Ants are known to be very useful.

The only safe rule is to let every living thing alone and not molest it unless we know for certain that it is dangerous or destructive. If it must be destroyed do it as painlessly as possible.

The plans of Nature are so vast we know just a very little. We must take it for granted that every living thing has a use or Nature would not have put it here—let us help Nature. We may not know at all what that use is, but we know so very, very little of the vast world it is safe only not to destroy, not to hurt, but to help in almost every case. Besides all that, every living thing has as good a right as we have to live and enjoy his life and be helped in doing so and not to be hurt by us except when the contrary is necessary.

Second Year:

What we ought to do for dumb animals: In general we ought to do all we can to make any dumb animal which belongs to us or is in our care comfortable and happy, each according to his nature and needs, and carefully keep from any injury or neglect which would make them unhappy or uncomfortable. We ought to think of them, feel for them, speak for them and act for them—since in most cases they cannot think, speak or act for themselves. In order to even partly understand them we have to feel with them and for them so as to know what to do for them and what they want. In order to do that we have to study them, try to understand them and put ourselves as far as possible in their places. We ought also to do for all dumb animals which do not belong to us and are not in our care all we can to protect them when they need protection and get for them whatever they need and lack.

Horses, for example, need plenty of good food, such as they like and as is good for them, pure water whenever they are thirsty, a good bed, shelter when they need it from cold and heat, kind works and kind treatment such as we ought to give to children. We ought to teach them whatever they need to know and to control and restrain them when necessary just as we ought to treat children. The best possible rule is to always treat dumb animals as you feel you ought to be treated if you were in their place. It is customary to speak of "breaking" horses. It would be just as foolish and cruel to speak of "breaking" children when what we mean in each case is teaching and training horses and children. Too often the old, stupid, cruel ways of roughly and abusively "breaking" them with blows and harsh bits and oaths and other injuries literally broke their hearts and spirits and bodies. They ought to be taught and trained with all the kindness, patience, gentleness, thoughtfulness and understanding possible, exactly as we teach and train children, since dumb animals are in reality like children that can never grow up. One does not need to be harsh and cruel in order to be firm. Their harness should fit and be easy to wear, making no sores or strains. They should not be worked too long nor too hard, their loads should not be too heavy, their shoes should fit and be comfortable just as ours should. They should not be frightened nor abused with words. In stables of high bred horses a man who swears at a horse is discharged on the spot. Much of our pleasure, comfort and health in life comes from good food, from having what we like to eat—it is the same

with them. Don't feed them what is cheap unless it is also good. Give them plenty of food they like and clean, pure water. When they are sick or sore they should be rested and cared for just as we do for ourselves. Use the Golden Rule in all you have to do with horses and all other dumb animals—do unto them as ye would that they should do unto you.

All that has been said about horses applies also, as far as their cases are alike, to other animals—good and plentiful food, drink and shelter, good beds, teaching, training and always kindness, kindness, kindness—studying them to find out what they feel and what they want. No two horses, cows, dogs, cats or other animals are exactly alike in their minds and hearts any more than in their bodies. In teaching cows to drive and to be milked, sheep to drive and to be sheared, dogs and cats to know what is wanted of them and all other animals never be impatient, rough, angry or tyrannical. Never tyrannize over dumb animals just because they are in your power. Never tease or tantalize them—they do not understand that and it makes them resentful and hurts their feelings. Power—over either dumb animals or men—is given us to use gently, kindly, wisely and for their good, not for their harm. If dumb animals, not our own, are either neglected or abused, we ought to do all in our power to have them protected.

No wild animal or bird should be molested or killed unless it is necessary or justifiable. On the contrary when others injure or kill them it is our duty to protect the wild creatures, if we can. Always let us try to understand them, to remember they have no hands, no language, no relatives nor friends nor family such as we have, but stand alone in a bitter world, let us think for them and feel for them and act for them and be always kind, kind, kind and courageous and active in their defence.

The ways and methods of applying the foregoing with children are infinite. Let the children describe and tell stories of any animals they have or know, describe what they want and what should be done for them and by whom. Base it on "if I were that horse, cow, dog, cat, sheep, chicken, bird, squirrel, deer or any other animal—what would I want and need and what would it be everybody's duty to do for me?" How would I feel and what could I do? If I were a bird in a cage what would I want and what ought people to do for me? If I were that mother dog or mother cat with those puppies or kittens what would I want and what ought everybody to do for me? If I were a dog going

down the street and met some boys how would I want them to treat me? If I were a horse tired or cold or hungry or thirsty or with sores on me what ought I to have and who ought to give it to me or do it for me? If I were a wild bird singing in the tree or on the fence how would I think people ought to treat me? Is is ever funny or sport to tease or annoy or hurt or make fun of any dumb animal? Should we every speak or feel contemptuously of any animals because he is old or bony or poor or lame? How should we feel and speak? And so on, etc., etc.—the field for teaching is limitless.

Third Year:

What we owe to any helpless creature and why:

In general every normal human wants to help any creature unable to help itself. Anybody so selfish, indifferent or hard that he does not feel this impulse is beneath what we have a right to expect in everybody and is not to be trusted. He is only a little better than the wrong-doer himself. If his impulse is too weak to make him act it is very feeble. We owe to every helpless creature, brute or human, all the assistance and protection we can in reason furnish. It is an obligation laid upon us as humans. In some cases the law recognizes a criminal responsibility for failing to give help, and even when it does not public sentiment condemns such failure in the strongest way. If we stop to consider a moment the pathetic helplessness of dumb animals we begin to feel at once the urge to aid them. Think of it. They have no friends among their own kind, no family, no relatives, no associates who can help them even if they knew enough to do so. All of us do have such persons on whom we can depend. They stand all alone. They have nothing but paws and hoofs instead of hands like us. They have no language but a cry. They are the necessary victims of any enemy stronger than they are. They are even more helpless than very small children because a child's importance almost always secures help for it in distress. Many persons ignorantly look down upon and despise dumb animals. They think vaguely it is beneath their dignity and importance to concern themselves for dumb animals. Moreover children are of our own kind. A child in a sense belongs to the whole human race. His distress touches all of us. It is not so with the dumb animals—they have only one friend among humans where a child has a hundred. Millions of people regard dumb animals as Things, as property, as merchandise—and never think of their feelings, their rights and

their sufferings. Millions of others are concerned only about their own dumb animals—because they are their own, and not because they are helpless.

Every little dumb creature comes into this world of struggle for existence, full of implacable and powerful enemies—all alone. If humans came into life so weak, so without friends, or understanding, with such handicaps, without speech, without hands, surrounded on every hand by enemies—what a hard, bitter, remorseless, hopeless world it would be to him! How many of us would even survive its hardships for a short time? Yet that is precisely the condition of life for almost every dumb creature—fear, pain, anxiety, vigilance as the price of life, starvation, thirst, ignorance of almost all the things humans know and almost at any moment death.

Let the teacher tell the children to imagine themselves any of the various kinds of dumb animals they know or know about and say what they would do and how they would feel if they were treated as they see dumb animals treated, and then let them tell in detail how dumb animals of the various kinds ought to be treated. Here, as in all this work, let the children bring stories of their own dumb animals and others. Let the work be informal and free. When possible let them bring their pets to school to illustrate the points of the lessons and the stories the children themselves tell. In almost every class there will be some children who have by nature the affectionate, protecting, understanding attitude toward dumb animals—let them teach those who are deficient in it. Here, as in all these outlines, there is an unlimited field for questions designed to make the children think for themselves and to arouse any dormant feelings of sympathy.

Fourth Year:

The bitterness of helplessness. We all know how hard it is to stand abuse or neglect or injury when we cannot help ourselves. We know how it discourages us, makes us resentful, takes away our confidence and pleasure in life and in time fills us with hatred or despair. As far as they go there is good reason to think the dumb animals suffer in this way exactly as we do, that they realize their helplessness and have their feelings hurt by ill-treatment exactly as we do. The horse trembles in the presence of one he fears. The dog cringes and tries to propitiate his enemy. If a dumb animal has courage and spirit he carries resentment toward those who injure him. The long-standing grudges elephants carry

against their enemies is well known. When dogs are scolded they show plainly their hurt feelings. In well-kept dairies an employe who swears at a cow is discharged at once because it causes a loss of milk—the cow's feelings are hurt. In stables of thoroughbred horses the same rule exists, it hurts the horses and impairs their usefulness if their feelings are hurt by bad and rough language to them. There is no reason why the same rule does not carry on down through other dumb animals about which we know little or which we cannot observe. Loving kindness, forbearance, understanding, help and protection is our duty to dumb animals and their right from us. The same things are due from us to each other when we need them. We must supply the deficiencies of dumb animals, guess at what they cannot tell us and minister to their needs. We ought to do the same things for each other—lend our strength and our wisdom to those who are weaker or less wise than we are. Most of the spirit of resentment and ill-will which rises out of a sense of helpless injury would disappear from the world if we did that. In this case again, let the children bring stories of the sensitiveness of their pets and of other dumb animals and let them compare their own feelings under injury or injustice with those of dumb animals as far as they can tell. Question the children one by one as to their reaction to injustice, injury or neglect in specific forms. Point out the remedy.

Fifth and Sixth Years:

The bad effect of ill-treatment of other creatures on ourselves.

In general every act of injustice or injury to any other creature injures us, weakens our conscience, makes it easier to do wrong again, hardens our sympathies and tends to wickedness. It has a bad effect upon us, like a black mark on a sheet of white paper. Conscience at first tells us when we do wrong but after a while the voice of conscience is stilled. We grow hard and evil and in time even come to take pleasure in wrong doing. Nothing truer was ever written than Pope's famous lines:

"Vice is a monster of such frightful mien
That to be hated needs but to be seen;
But, seen too oft, familiar with its face,
We first endure, then pity, then embrace."

Most of us are not so bad to start with as bad by practice.

Almost every bad deed consists in disregarding the rights of some other creature, at the time and under the circumstances un-

able to protect himself. Nearly all the preventable trouble and suffering and pain in the world comes in this way.

Now then, if we begin by being unkind, indifferent and cruel to dumb animals it is a short and easy step to being unkind and evil toward each other. And every time we behave so toward them it becomes easier to do so again, just as every time we ill-treat each other it is easier to ill-treat each other again. If we scold dumb animals and speak harshly to them and keep on doing it after a little while we get into the habit of scolding them. Their feelings are hurt just as our are. Then it comes easy to scold and speak harshly to each other, especially to those who cannot help themselves, like dumb animals. Our disposition to be kind, to pay due attention to the feelings of others, begins to break down. And right here it may be said that almost as much, if not more, harm is done by bitter words, by scolding, by hateful speech as is done by evil deeds. It is much to be doubted if any good is ever done by them. If we begin to neglect dumb animals dependent on us, after a while it is easy to do so—to let them go without food, water and shelter as long as we are comfortable ourselves. If we let ourselves strike, jerk, over-ride or in any other way abuse a horse a few times we begin to think nothing of it and a little later it is easy to be violent with people who cannot help themselves, children, old persons, and persons dependent on us. Anyone who abuses or neglects a dumb animal will when occasion arises do the same thing to humans if he thinks it is safe. The essential thing in all wrong doing and all crime is disregard of the rights of some creature, brute or human, who cannot at the time protect himself. When a man steals he robs somebody who could not at the time prevent it. When a murder is committed the victim could not at the time protect himself. In all crime the victims are for the time being helpless—exactly as dumb animals are. If we learn to be always kind and considerate of dumb animals because that is right, we are learning at the same time to be kind and considerate of each other. If we are unkind and abusive to dumb animals we are learning to be unkind and abusive to each other.

Let the teacher ask the children how they feel when they do something bad to a dumb animal or to anybody else—whether they do not feel ashamed and sorry, because they have done a cowardly and wicked thing. In almost every case they will admit that is so. If they are asked on the contrary if they do not feel

good and happy when the have done a kind and unselfish thing they will in every case say so.

In class apply these principles to the daily relations of the children with their pets, with their parents, their brothers and sisters, with dumb animals belonging to others, with wild birds and animals, with strangers. An infinite variety of questions, stories by the children, their views and ideas is possible. In the main the soundness of their feelings and ideas will be surprising. They will make few mistakes.

OUTLINE

OF

INDUSTRIAL ARTS

(See Junior High School Course)

OUTLINE

OF

ART

ART

Pupils should be led to acquire the habit of using the pencil as an aid to expression. The teacher should set the example.

The first consideration in arranging a Course of Study in drawing is to establish a definition. When we enable the student to use his art in connection with his daily life, we justify our teaching of this subject. We wish to develop in our pupils the power to appreciate beauty, order, and fitness, rather than make artists of them. Our definite aim should be to have pupils;

Recognize and enjoy the work of great artists.
Select good pictures for home and school.
Arrange flowers.
Choose good tableware.
Select harmonious color combinations for dress and garden.

Instruction in drawing in the elementary schools should be given primarily to teach the pupils how to draw; that is, it should develop power to express ideas in graphic terms. Constructive work should be given to develop power to use tools skillfully and to cultivate the habit of working neatly and accurately.

Correct habits of drawing cannot be formed nor can correct method of using the pencil or brush be practiced unless correct posture is maintained. The pupils should sit erect and draw with a free arm. The paper should be held by the left hand at least twenty inches from the eyes and at right angles to the direction of sight.

Free arm and wrist drawing necessitates the use of drawing boards. The best drawing board for classroom use is a piece of stiff cardboard. The paper should be fastened to the cardboard by one or two clips.

No rule can be given for holding the pencil or crayon. If the pupils, while drawing, maintain a posture that will allow free arm and wrist movement, they will naturally hold these tools correctly. Teachers of first and second year classes, however, may require their pupils to hold the crayon lightly, without cramping the fingers, about one-half inch from its point, and at right angles to the line drawn.

The eraser should not be used in the first four years. When used in grades 5 to 9, it should be employed only "finishing" a drawing. When making a sketch or during the work of placing the leading lines of a required drawing it should not be used.

Drawing on the Blackboard

Drawing on the blackboard should be encouraged and freely practiced by pupils of all grades. In freehand drawing on the board, a piece of chalk about one inch in length should be employed. Its sides should be used rather than its end. It should be held lengthwise in the direction of the line drawn. The methods of making a freehand drawing on the blackboard should be the same as that employed in drawing on paper with a pencil or crayon. From a few seconds to five minutes is generally time enough to allow for the making of any drawing which may be required of the pupils of the first four years. It is impossible to fix the time which should be devoted to an exercise in drawing by the pupils of the last four years. Slow laborious drawing should not be permitted in any grade.

First Grade

1. All children should be able to recognize colors, and be able to arrange the rainbow colors in order.
2. They should recognize definite forms as square, circle, triangle, and so forth.
3. Make simple forms, such as ball, box, hill, using crayon, chalk, clay, or cut paper.
4. Ability to express through illustration.
5. Draw, cut or model such forms as duck, house, bird, chicken.
6. Should be able to recognize several pictures—Baby Stuart, Madonna of the Chair, The First Step.

Second Grade

Similar to First Grade. Teachers should refer to First Grade outline.

Foster spontaneous response and stimulate child's judgment by encouraging him to make thoughtful choices.

Add new forms.

Proper care for material in a water color lesson.

Fold paper and cut simple stencil.

Illustrate a story.

Recognize several pictures, "The Knitting Lesson," "Millet," "Lion," "Landseer."

Recognize and name six spectrum hues, black, gray, brown, and white. Light and dark in color.

Mix pigments and discover that yellow and blue make green, blue and red make purple.

The objects made should be suggested by the pupil's interests. Simple decorations may be applied to constructed forms. Simple border arrangements may be made by the use of colored papers or with the colored crayons or the brush.

Grade Two Pupils Should Know:

(1) That a circle, seen obliquely appears as an ellipse and be able to apply this principle when drawing simple cylindrical or conical objects such as jars, pails, cups, and so forth.

(2) They should be able to illustrate the following terms: Straight, curved, vertical, horizontal, square, oblong, circle, triangle, angle.

(3) They should be able to use the one-inch measure.

Third and Fourth Grade

Free hand and construction drawing. Constructive work and decorative work. Color. Materials. Brown or gray manilla paper, white paper, colored paper, pasteboard drawing boards, black crayon, colored crayons, soft pencil, medium hard pencil for construction drawing, water color, oak-tag, scissors, try-square and ruler on which appear the one-inch, one-half inch, and one-quarter inch divisions. Free hand drawing. Work under this heading should include drawing by imitation, from memory or from imagination and from objects. The forms represented should be suggested by the work done in other subjects, and may show the pupil's out of school environment, occupation and games. The aim should be to develop habits of observation, and power to judge form.

Construction Drawing and Construction Work. The aim in work should be to cultivate accuracy, neatness and skill in handling simple tools. Objects made should be those suggested by the pupil's interests and may include simple geometric forms and patterns, holiday cards, booklets, and so forth.

Color and Decorative Work. The lessons in color should be developed from the study of nature, drawing and design.

The primary and binary colors should be reviewed, and the recognition of tints and shades of color should be developed. The work in decoration should include the making of simple border designs, and decoration of constructed forms. Efforts should be

made to secure accuracy in measurements and skill in handling simple tools.

Grade Three Pupils Should Konw:

(1) That a circle seen obliquely appears as an ellipse, and be able to draw simple cylindrical and conical objects as seen below the eye level.

(2) They should be able to use water color brush and to distinguish and name the six leading spectrum colors. They should be familiar with the terms brown, pink, purple and gray, and should be able to mix green, orange, violet and brown.

(3) They should be able to illustrate the following terms: Vertical, angle, triangle, circle, ellipse, square, oblong, cylinder, sphere.

(4) They should be able to draw and construct with the aid of the try-square and scissors, simple geometric forms and patterns, such as holiday cards, simple folders, booklets, book-marks, and so forth, whose shapes are based upon the square and oblong, from illustrated descriptions, which present the shape and dimentions of such forms and patterns.

Grade Four Pupils Should Know:

(1) How to shade their drawings to produce the appearance of solidarity and to represent the shadows which the objects drawn may cast. They should be able to represent simple color values with the black crayon or pencil.

(2) They should use intelligently the terms: Tint and shade. They should know what warm and cold colors are, and the meaning of the term "Harmonious" as applied to color. They should be able to use the water-color brush with readiness in representing the form and color of simple leaves, flowers, fruits, vegetables, trees, simple landscapes and so forth.

(3) They should be able to apply to their constructed forms appropriate decorations and make simple drawings in color of simple border designs or surface patterns.

(4) They should be able to illustrate the following terms: Vertical, horizontal, oblique, parallel, angle, triangle, circle, ellipse, oval, square, oblong, diameter, diagonal, right angle, acute angle, cylinder, cove, sphere, cube, square prism.

(5) They should be able to use the one-inch, one-half inch and one-quarter inch measures.

(6) They should be able to draw and construct, with the aid of the try-square, ruler and scissors, simple geometric forms and patterns of cubes, prisms, simple boxes and envelopes, from illustrated descriptions which represent the shapes and dimensions of such forms and patterns.

Grades Five and Six

Free hand and construction drawing. Decorative work. Use of compass. Principles of Perspective. Color.

Materials. Brown and gray manilla paper, white paper, colored paper, pasteboard drawing boards, pencil having soft medium lead for free-hand drawing, pencil for mechanical drawing, water color, compasses, try-squares, scissors and ruler. Blackboard compasses and blackboard ruler for teacher's use.

Free Hand Drawing and Principles of Perspective: The purpose of instruction should be to develop the principles of angular perspective through drawing familiar forms by imitation, from objects and from dictation aided by memory and imagination. The objects pictured should be largely those whose forms are based upon the rectangular prism, such as boxes, books, packages, and so forth, as seen below the level of the eye. They may be drawn simply first, but afterwards in groups of two. Nature forms, such as flowers, leaves, and vegetables may be included.

Constructive Drawing and Constructive Work: The aim should be to develop power to express the facts of form necessary for construction and to cultivate accuracy in execution. The exercises should include the planning and making of simple forms, suggested by the needs of the school, the home, or the pupil's need.

Decorative Work and Color: The instruction in color should be closely related and incidental to the work in decoration.

It should aim to develop an appreciation of fitness to purpose and good taste in design. The principle of balance should be taught incidentally. The designs may include studies for the decoration of constructed objects or for a decorative purpose and whatever may be suggested by the pupil's interest and the needs of the school.

Grade Five Pupils Should Know:

(1) They should know the perspective principle that a circle seen obliquely appears as an ellipse, and be able to draw cylindri-

cal and conical objects singly or in groups of two seen below the eye level, from the objects themselves, or from memory or imagination. They should be able to represent simple color values with the black crayon or pencil.

(2) They should be able to paint in water color a flat wash and objects such as simple leaf sprays and flowers. They should use intelligently the terms tint and shade. They should be familiar with the colors scarlet, crimson and russet.

(3) They should know how to use compasses and be familiar with the one-quarter, one-half, three-quarter and one-inch measure. They should be able to illustrate the following terms: Vertical, horizontal, oblique, parallel, angle, triangle, circle, circumference, ellipse, oval, square, oblong, rectangle, diameter, diagonal, perpendicular, right angle, acute angle, right angle triangle, equilateral triangle, cylinder, cone, pyramid, sphere, hemisphere, cube, square prism, oblong prism, triangular prism, bisect.

(4) They should be able to draw and construct with the aid of the try-square, ruler, compasses and scissors, geometric forms and patterns of cubes, squares, and oblong prisms, simple boxes, envelopes, and so forth from oral or illustrated descriptions or specifications which represent the shapes and dimensions of such forms and patterns.

(5) They should be able to make simple and appropriate designs for the decorations of any form suggested by the needs of the school and to show in this work an appreciation of harmonious coloring.

Grade Six Pupils Should Know:

(1) Grade six should know the following perspective principles and be able to apply them in drawing simple objects singly or in groups of two from the objects themselves from memory or from imagination.

(a) Receding horizontal edges, converse to the same point. (b) Receding horizontal edges seen below the eye level slant up. (c) Surfaces when viewed obliquely are fore shortened. (d) Distance affects the apparent size of objects.

(2) They should be able to make simple decorative designs, harmoniously colored for purposes suggested by the school's or pupil's interests.

Such designs may include lettering, which should be well formed and spaced.

Grades Seven and Eight

Application of Principles of Perspective Color. Construction Drawing. Constructive Work and Decorative Work.

Materials: Brown or gray manilla paper, white paper, tracing paper, oak-tag, drawing board, T square, triangles, compasses, ruler or scale on which one-sixteenth inch divisions are marked, scissors, thumb tacks, hard pencil, soft pencil, eraser and water colors. Colored paper and pencils, colored crayons, and charcoal may also be used.

Application of Principles of Perspective: The purpose of the instruction should be to fix, through repeated tests in sketching from observation, from memory and imagination, the principles of perspective and pictorial design. Technical excellence and rapid execution should be sought for, with emphasis placed upon using the pencil as an effective means of expression. The objects drawn should be nature, life and familiar forms. The teacher should keep in mind that the most effective method of teaching drawing is by example, and constant opportunity should be given pupils to view examples not only of good drawing, but of good design, color. The aims should be to develop knowledge and appreciation of harmonious color combinations and skill in the use of the brush.

Construction Drawing: To be required of boys only. The instruction to be given in the shops. In schools without shops the instruction should consist in the making of portfolios, covers for school exercises, cases, sample books, and so forth. That for girls may, in addition, include the making of objects suggested by pupil's work in design.

Decorative Work: For boys and girls should aim to develop an appreciation of beauty in design, both in color and form. Instruction should be illustrated by many examples.

Grade Seven Should Know:

(1) How to draw in free-hand perspective, simple, familiar objects, singly or in groups of two, from memory or objects.

(2) They should be able to illustrate free-hand the following terms: Pentagon, hexagon, octagon, prisms and pyramids of different forms such as square, oblong, triangular and hexagonal; circumference, diameter, radius, bisect, trisect.

(3) They should be able to letter simple signs or posters and

show in this work a knowledge of the rules and spacing and an appreciation of good structure as applied to printing.

Grade Eight Should Know:

(1) How to draw in free-hand perspective, simple cylindrical, conical or straight line objects.

(2) They should know how to represent simple color values with the pencil. They should be able to draw and paint simple leaf sprays and flowers, and to paint flat or graded washes of color and to mix *any* desired color.

(3) They should be able to illustrate the following terms: Vertical, horizontal, oblique, parallel, perpendicular, semi-circle, hemisphere, rectangle, oblong, right-angle triangle, isosceles triangle, scalene triangle, equilateral triangle, pentagon, hexagon, octagon, cube, cone, cylinder, and prisms and pyramids of different forms, such as: square, oblong, triangular, hexagonal, and octagonal; frustrum, circumference, arc, diameter, radius, radii, bisect, trisect.

They should be familiar with the one-eighth and one-sixteenth inch measures.

OUTLINE

OF

MUSIC

MUSIC

The Music lesson should form a part of every curriculum in which every child should participate. It is a subject to be enjoyed by all, not only by the gifted few. It gives great pleasure to take part in the making of music but perhaps affords even greater pleasure when the child is able to listen intelligently and to appreciate the work of masters and artists.

If we are to let the children sing so that the "world may be filled with music," attention must be given to their voices. Ear training must be stressed. Musical memory cultivated.

The use of the piano with familiar songs is advisable, but the instrument should be absolutely in tune.

The purpose of studying music in the elementary schools is to do all that can reasonably be done to acquaint pupils with the possibilities of enjoyment in music, and to lead them to love that which is fine and beautiful.

Course of Study

First and Second Year

Voice Training

Particular attention should be given to tone quality, phrasing and interpretation and lyric diction. No coarse singing or straining of the voice should be tolerated. Correct position of the lips in the production of vowel and consonant sounds should be strictly observed.

Smooth, sustained tones.

Purity of tone.

Range within staff.

Ear Training

The best ear training comes from singing songs either individually or in concert. Keeping the voice in tune with other voices cannot be learned too early. The teacher will soon discover that it is impossible to begin ear training of the proper sort until the child has learned to make a smooth steady tone, for it is the pupil's own voice sounding with others that trains his ears.

So-called monotones.

The singing of rote songs for the joy of singing.

Recognition of a few familiar melodies.

Time

Rhythmic sense developed through gesture.

Rhythmic Games.

The training of the rhythmic sense, which is inherent in every child, into recognition and analysis is invaluable, and the children enjoy it greatly.

As a culmination of the rhythmic games, the organization of a toy bank is very delightful to the children. Triangles, cymbals, bells, tambourines, blocks, drums, and so forth are easily obtained.

A group of children may sing a song, while the others play it; a march record may be played very slowly, and the children play in rhythm to that. The best music for the purpose is well marked simple things, played on the piano, for the melody can best be heard when the piano is used.

Tune

Direction of voice. Recognition of high and low, loud and soft, long and short, smooth and staccato, sad and gay; tones that are repeated, slips, skips.

Many children who come to school cannot sing on pitch. These children are rarely "monotones," but have not "caught their voices," and so cannot produce the thing they hear. All children must be taught *how* to *use* their voices.

Interpretation.

Songs rendered according to meaning. Stories told simply, naturally, with good enunciation. Dramatization.

Listening Lessons. Appreciation.

In selecting the music which children should hear the teacher must consider the question as to what is most interesting to the class now. The child in the first grade is in the so-called sensory period. His attention must be caught, his curiosity aroused. He must learn for what to listen. This has partly been accomplished through the tone and rhythm games.

The music given him must be so simple and so plainly within his experience that not what the teacher says, but the music itself, will contain meaning for him.

Attention must first be taught. For this, descriptive music is best, "Bird Voices," "In a Clock Store," "Children's Toy March," and others, belong to this class. The teacher should simply play the record first, letting the children tell her what they

heard. She may then make suggestion and the play the record again.

Now the interest of the child, which has been caught, must be held by playing to him music somewhat less descriptive, in which his imagination has greater chance for play. Dances, simple melodies played by different instruments—cornet, flute, violin, harp, bells, and so forth, and music interesting rhythmically, belong to this class.

The children are now ready for the second group of selections. To this class belong: "Humoresque," "Lullaby," "Traumeri," "Spring Song," "To the Spring," and so forth.

Let the children discuss the character of the music. Is it sad, or happy music? Is it thoughtful or gay? How does it make one feel?

No more than this should be attempted in the first grade. The teacher should talk very little about the music. Play the record often. Let the children discuss it. Let them sing with the record after they know it. Give tests of memory. Play a little of one record, then another, and so forth. See how many titles the children remember.

Length of Music Period

At least fifteen minutes each day should be given in the first grade, divided as follows:

Seven minutes class song singing. Four minutes individual song singing. Four minutes work with "low" voices.

A. Special emphasis of work for first grades are:

1. To instill a love of music.
2. To teacher children to sing for recreation and self expression. Definite daily planning of work must lead to the result that, at the end of the first year of school every child shall have discovered his singing voice and be able to carry a simple melody in tune.

B. Scope of work:

Aim to teach at least one new song a week. When songs are short, two can easily be taught.

By the end of the term a class should be able to sing at least twenty songs with excellent tone and rhythm and full knowledge of the words. Songs on next page.

Second Year

Voice Training:

The voice training given through tone games in the First Grade should be reviewed and continued in the Second Grade.

Sight Reading:

Begin individual sight reading in First and Second Grade.

Time:

Development of two, three and four part meter sense through ear and eye. Note values developed through rote songs and staff representation.

Tune:

Development of intervals through rote song. Represent on staff and sing.

Interpretation:

Same as First year.

Rote songs and singing by imitation to give the child musical experience, to furnish a basis for further study, and to lead him to sing with good quality.

Scope of work:

Children should have ability to sing a number of rote songs with good tone, quality, distinct enunciation, correct interpretation and to dramatize these songs when appropriate.

(a) To recognize and name 2/4, 3/4 measure signature, quarter notes, half notes, dotted half notes, and corresponding rests, staff, measure, bar and double bar.

(b) To sing at sight with words or sol, fa, simple melody exercises in 2/4 and 3/4 measure from the blackboard, card, chart or book, introducing the quarter note, half note, dotted half note and corresponding rests, and to observe time relations by giving proper accents.

(c) To recognize simple melodies on hearing.

(d) To sing and write original melodies.

Songs required in the First Grade

1. America (at least two stanzas).
2. Battle Hymn of the Republic (at least one stanza).
3. Baa, Baa, Baa, Black Sheep (Grant Schafer or Elliot).
4. Hey, Diddle Diddle (Gaynor or Elliot).

5. Ding Dong Bell (old tune—Elliot).
6. The Farmer in the Dell (old tune—Elliot).
7. Sweet and Low.
8. The Mulberry Bush (old tune—Elliot).

Records Suitable to the First Grade

1. Autumn Winds.
2. Arbor Day Song.
3. Dafydowndilly.
4. The Christmas Tree.
5. Cat Tails.
6. Wah wah tay see.
7. Boston Town.
8. Mr. Duck and Mr. Turkey.
9. The Windy Day.
10. The Secret.

Songs Required in the Second Grade

1. America (all).
2. Star Spangled Banner (at least two stanzas).
3. Battle Hymn of the Republic (at least one stanza).
4. Speed our Republic (one stanza).
5. Pussy Cat, Pussy Cat.
6. Little Bo Peep.
7. See Saw, Margery Daw.
8. Yankee Doodle (one stanza).
9. Old Folks at Home.

Records Suitable for the Second Grade

1. The Whistler and his Dog.
2. In a Clock Store.
3. Cradle Song.
4. Woodland Echoes.
5. Spring Songs.
6. Children's Toy March.
7. Dance of the Goblins.

Recommended for Second Grade

1. Minuet (Beethoven).
2. Indian Lament (Dvorak).
3. The Music Box.
4. Mighty Lak' a Rose.

5. The Cuckoo Clock.
6. Forge in the Forest.
7. Spanish Dance.
8. Blue Danube Waltz.

Third and Fourth Grades

Voice Training—Same as First Year.

Ear Training—Same as Second Year. More difficult tests. New melodies for recognition.

Sight Singing.

Texts in the hands of pupils. Sing simple songs at sight. Individual singing from books begins. 6/8 meter. Songs as outlined. Letters of staff, names of keys, meter signatures, notes and rests.

Interepretation.

Expression marks found in songs studied.

Rote songs should now include the tonal and rhythmic problems to be studied. Writing of original melodic phrases on the staff.

Teaching music in the Fourth Grade should be delightful, for the children have learned to love this work, for their voices are well trained and they have had enough experiences and training in music elements to give them the power to be very independent and quick.

Care should be taken not to give these children material that is too difficult. Select material that is difficult enough to insure good effort, but not so hard that they fail to accomplish what they set out to do with it.

Particular attention should be given to tone quality, phrasing, and interpretation, through pronunciation, enunciation, and lyric diction. No course singing or straining of the voice should be tolerated. Correct position of the lips in the production of vowel and consonant sounds should be strictly observed.

Songs and exercises in 6/8 measure and in 2/4, 3/4, and 4/4 measure introducing two eighth notes to the beat, the dotted quarter followed by the eighth, sharp four and flat seven should be sung from books.

It is suggested that lessons in appreciation be given periodically to combined classes of the two grades.

Summary of the Two Years

The children should have the ability to sing a number of rote songs with good tone quality, distinct enunciation, and correct interpretation.

The individual pupil should have the ability:

(a) To recognize and name 2/4, 3/4, 4/4 and 6/8 measure, signatures, quarter notes, half notes, whole notes, eighth notes, and corresponding rests, the dotted quarter followed by the eighth, staff, measure, bar, double bar, tie, slur, sharp, flat, natural as cancel, G clef and pitch names.

(b) To sing from staff notation songs and melodies introducing two eighth notes to a beat, the dotted quarter followed by the eighth, sharp four and flat seven.

Songs Required in Third Grade

1. America (all).
2. Star Spangled Banner (three stanzas).
3. Battle Hymn of the Republic.
4. Speed our Republic (three stanzas).
5. Old Folks at Home.
6. Carol. Children Carol.
7. Old King Cole.
8. Scotland's Burning (old round).
9. Three Blind Mice (old round).

Songs Required in the Fourth Grade.

1. Review all required songs outlined for previous grades.
2. Columbia the Gem of the Ocean.
3. Home, Sweet Home.
4. Old Kentucky Home.
5. Yankee Doodle (three stanzas).
6. Abide with Me.
7. Onward Christian Soldiers.
8. Blue Bells of Scotland.

Records Recommended for Third and Fourth Grades

1. Morning, Peer Gynt.
2. Anitra's Dance, Peer Gynt.
3. Triumphal March from Aida.
4. Allegro, Surprise Symphony.
5. Minuet (Paderewski).
6. Spanish Dance.
7. Toreador March, Carmen (Bizet) (Orchestral).
8. Witches Dance, Hansel and Gretal.

County Schools

In mixed grades and in ungraded schools the first year in which music study is attempted, rhythm and tone games, rote singing, and hearing music by means of the phonograph will be found to be most profitable: (1) In establishing an interest in music. (2) In showing the child how to use his voice. (3) In creating a spirit of co-operation. (4) In laying a foundation for a systematic study of the elements of music.

The teacher should become familiar with the course of study for the grades included in her school. In this way she can learn to choose from the outline what will best suit her class.

Ungraded Schools

Primary Grades

Use tone games, rhythm games, study songs and records chosen from the outlines for first, second and third grades. Choose easy material. Be careful to follow directions.

Do no sight reading until the children enjoy song singing, can sing with a good tone, and can recognize the elements of music in the study songs. Give the first sight reading from the board. After the children become accustomed to following notes and words, give out books and sing the same songs.

A primary ungraded school (first three or four grades) should at the end of the first year of music: (1) Sing with a good tone. (2) Enjoy singing. (3) Know the required songs from memory. (4) Recognize in study songs, phrase, beat, measure, high, low, long, short tones; tones and phrases alike. (5) Enjoy hearing music.

Voice Training:

Voices Classified.

Careful consideration of the changing voice and assignment of parts.

Ear Training:

Chords and Harmony.

Sight Singing:

Part songs should be studied. Unison singing in the middle range of the voice is a very good exercise for the voices and for appreciation. The boys are interested in anything for men, or

that seems to suit their growing up, that they have no difficulty in learning quickly to read well from the bass staff.

Appreciation:

These children have reached the age where folk music, as such, will interest them. They should sing many folk songs and dance folk dances. They will understand the use of folk tunes in art music now, so some of this should be studied.

Correlate with English. Write original stories of the folk being studied. The southern negroes and creoles will interest especially. Consequently, Dvorak's music will be much enjoyed. Use Dvorak as a subject of study. Study his country and his personality, and what he did for American music.

Summary of the Two Years

The pupils should be able to sing and to interpret a number of unison and part songs.

The individual child should have the ability:

(a) To name the key, and to give the position of one to eight from the signature.

(b) To sing from staff notation songs and melodies introducing chromatics; two, three and four sounds to the beat; the dotted quarter followed by the eighth, the dotted eighth followed by the sixteenth and syncopation.

(c) To recognize and name all symbols of staff notation, dynamics, tempo and expression.

Songs Required in the Seventh and Eighth Grades

1. Tramp, Tramp, Tramp, the Boys are Marching.
2. Tenting on the Old Camp Ground.
3. When Johnnie Comes Marching Home.
4. Flow Gently Sweet Afton.
5. Annie Laurie.
6. Maryland, My Maryland.
7. America, the Beautiful.
8. Nazareth (Gounod).

Supplementary Four-Part Songs Suggested

1. Lovely Appear (Gounod).
2. Toreador Chorus.
3. Love Divine.
4. The Lost Chord.
5. Soldiers' Chorus (Faust).
6. I Waited for the Lord (in four parts and solos).

Records Suggested for Seventh and Eighth Grades

1. Indian Lament (Dvorak).
2. Songs My Mother Taught Me (Dvorak).
3. March Slav (Tschaikowski).
4. Hungarian Dance, No. 5.
5. Children's Chorus, Seneca Indians.
6. Dagger Dance, Natoma (Herbert).
7. Dream of the Ancient Red Man (Gilbert).
8. Song of the Wolf (Gilbert).
9. Surprise Symphony (Haydn).

Music for Fifth and Sixth Year

General Suggestions:

1. Teacher to develop appreciation of music as something to be heard as well as to be expressed.
2. Continue the development of singing of beautiful songs.
3. Increase power in sight singing.
4. Add to the child's repertoire of worth-while songs.

Fifth Year

Voice Training:

Singing from book songs and melodies in various keys and rhythms.

Ear Training:

More difficult tests including chromatic tones. New melodies for recognition. No coarse singing or straining of voice should be tolerated.

Faulty tones can be corrected by singing "noo" on any necessary pitch.

Correct position of the lips in the production of vowel and consonant sounds should be strictly observed.

Special attention should be given to the development of the boy's voice.

Sight Singing:

After a song has been sung once, it is no longer suitable material for sight singing. Sing syllables first—words following. Parts should never be sung separately.

Sixth Year

Voice Training:

Recognition of keys from their signatures. Singing from book unison and part songs.

Individual singing and writing of original songs and melodies. Lessons in music appreciation.

Ear Training:

Same as Fifth year.

Sight Singing:

Dotted eighth note followed by sixteenth.

Summary of the Two Years

Fifth and Sixth

The individual child should have the ability:

To name the key and to give the position of one to eight from the signature.

To sing with good tone quality from staff notation songs and melodies introducing chromatics; two, three and four sounds to the beat; the dotted quarter followed by the eighth, the dotted eighth followed by the sixteenth and syncopation.

To recognize and name all symbols of staff notation, dynamics, tempo and expression.

To keep voices free and its tone pure; to train the boy's voice carefully.

Songs Required in Fifth Grade

1. Hail Columbia.
2. Rule Brittania.
3. Dixie.
4. The Campbells are Coming.
5. Hark the Herald Angels Sing.
6. Silent Night (in two parts).

Songs Required in the Sixth Grade

1. Auld Lang Syne.
2. Marseillaise.
3. Battle Cry of Freedom.
4. Old Black Joe.
5. Loch Lomend (old Scotch).
6. Carry Me Back to Old Virginny.

Songs Suggested for Fifth and Sixth Grades

1. Early to Bed (round).
2. Row, Row, Row Your Boat.
3. The Jolly Miller.
4. Oh, Dear, What Can the Matter Be.
5. Holy, Holy, Holy (in two parts).
6. Gin a Body.
7. Merrily, Merrily (round).
8. The Last Rose of Summer.
9. Long, Long Ago.
10. Boat Song.

Records Suggested for Fifth and Sixth Grade

1. To a Wild Rose.
2. Minuet in G.
3. Meditation.
4. Humoresque (Dvorak).
5. Taumerei.
6. Spring Song (Mendelssohn).
7. Butterfly (Grieg).
8. Serenade.
9. Midsummer Night's Dream Overture (Mendelssohn).
10. Hunting Song.

OUTLINE

OF

TEMPERANCE AND NARCOTIC INSTRUCTION

TEMPERANCE AND ANTI-NARCOTIC INSTRUCTION

A few have thought the continuation of scientific temperance instruction to be unnecessary, because of the victory of prohibition, both state and national. For two reasons, however, this is a fallacy: First, the law requiring scientific temperance instruction in the public schools of this state has never been repealed. Therefore, it is legally and morally obligatory upon the state school system to require this subject to be taught. Second, the crying need of the hour has become not so much "law enforcement," as "law observance," and a wide-spread law observance can only come from a citizenry willingly co-operating with the provisions of the statutes, because of knowledge of the physical and spiritual penalties attendant upon their violation.

The final prohibition victory was largely the result of temperance teaching in the schools. Because of this, a whole generation had reached the age of full citizenship who had been thoroughly instructed in the physical and spiritual evil resulting from the consumption of alcohol. And now a similar situation faces the commonwealth. Law enforcement can be facilitated only through conscientious law observance by the young people of today and tomorrow.

For these reasons this curriculum presents an outline course of study in scientific temperance.

Scientific Temperance

First Grade

Object: To establish such of the fundamental health habits as children of this age can be led to observe voluntarily by arousing attention and interest.

General Health Topics

(See Hygiene and Physical Education)

Position. Exercises in position sitting and standing; rules, as, "I sit and stand straight."

Play. Pleasing and attractive games that involve relaxation and good position.

Air and sunshine. Illustrate by comparing plant purposely kept in the dark with similar one allowed to grow in sunshine.

Rules:

Growth. Have frequent records of weight of pupils; observe growth in animals and connect with adequate and proper food.

Food. Eating to grow. Play store with pictures and samples of foods; pupils choose and buy (with play money); give reasons for or against pupil's selections.

Drinks. Show pictures of birds and animals drinking. Interest children in providing water for wild creatures when it is difficult for them to get it.

Repeat the buying play with drinks. Have paper cups labeled with names of different drinks. Place in two groups. First group: Water, milk, cocoa, lemonade, orange juice, grape juice, apple juice. Second group: Tea, coffee, wine, beer, cider, whisky.

Before the children begin to buy, put away the cups marked beer, wine and whisky, explaining that the sale of these drinks is forbidden by the law because they are harmful. Hence they will not be sold, even in play.

Name drinks in the group that are good for growth; those that are not good for children; those that are not good for anyone.

Children write or print the words "good" and "not good" in large letters on stiff paper and select best ones to place as labels for the drinks in the respective groups.

Rules: I choose good drinks to keep my body well and strong. I drink two or three glasses of milk every day.

Verse

The summer sun shone hot
  All through one July day
While little boys and girls
  Grew thirsty at their play.
Then, overhead, the clouds
  Drew shining raindrops up
And poured for every child
  A brim full buttercup.

Second Year

Object: To secure the child's active interest and co-operation in promoting health habits in the home, especially right habits of eating and of household cleanliness.

Homes: Develop purpose of homes, proper spirit, order, meals.

Play setting table for meals. Breakfast foods and dishes, glasses for milk and water. Cups and saucers for older people who drink coffee or tea. None for children; they may have cups for cambric tea or cocoa. Not all grown persons drink coffee or tea.

Table setting for luncheon and dinner showing kinds of food, serving and individual dishes.

Drinks (luncheon and dinner). Besides the glasses for water and milk there may be glasses for lemonade, orange or fresh fruit juices. Have children tell how fresh fruit juices are obtained. Emphasize necessity of having it made fresh and not allowed to stand. Set aside a glass of fermentable juice for a few days and with it a dish of apple or other fruit sauce. When all have begun to ferment bring before class and show. Call attention to the bubbles which show that both have become spoiled. Explain that they are losing their sweetness because the sugar is changing into something that was not in the sauce and juice before. The new substance is a poison and should not be taken into the stomach. (The conditions in the fruit sauce are more favorable to growth of moulds than to the ferment germs—wild yeast—hence the resulting change may not be alcoholic fermentation but moulding).

Explain that people have not always known about the harmfulness of the poison formed in fruit juices when they were allowed to stand and ferment and have used them to drink after they were no longer fresh and sweet. Many people do not know about it yet and continue to make wine from grapes and berries and cider from apples. But now laws have been passed forbidding this so that the people may no longer be harmed by them.

Children who are given wine to drink do not keep so well, do not grow so fast, and cannot do their work in schools as well as they would if they drank plenty of water and milk every day and fresh, unspoiled fruit juices occasionally.

Rules: I will drink plenty of water and milk. I may drink a little fresh fruit juice, but no fermented wine, cider, or beer.

Verse

Each flower holds up a dainty cup
To catch the rain and dew.
Each sparkling gem upon its stem
Lets light shine in and through.
The drink of flowers poured down in showers
Is just the drink for you.

Third Year

Object: This is the year best adapted to carrying the enthusiasm for health habits to a high pitch. It is accomplished more by providing the occasion and stimulus for observing health rules than by the presentation of facts. Later those will strengthen and confirm the practice of the health rules by the aid of reason.

Story, allegory, rhyme and love of beauty may be successfully employed at this time as aids in enlisting in health crusades and combating the enemies to health.

Topics—Foods: Food plays, dramatizing importance and special uses of certain foods. Choose plays that are not overweighted with information of precept, but that impress their main points by appeals to the child's love of beauty, humor, and spirited action.

Drink: "Robin's Cold Water Song."
I asked a sweet robin one morning in May
Who sang in the apple tree over the way
What 'twas he was singing so gaily about,
For I'd tried a long time but I could not find out.

"Why, I'm sure," he responded, "you cannot guess wrong;
Don't you know I am singing a cold water song?
Cold water, yes that's the first word of my lay,
And then don't you hear how I warble away?

"I've just come from dipping my beak in the spring
And spraying my coat with a splash of my wing.
Be sure to remember when hearing my song
That birds to the Cold Water Army belong."

Fourth Year

Object: To strengthen hygienic habits by relating them to simple facts, adapted to grade, which furnished reasons for the hygienic rules.

Topics:

Eating: The school lunch, kinds of food it should contain to meet needs of growing children; possibilities in hot school lunches; (Help for teachers in "The Lunch Hour," Bureau of Education, Department of Interior, Washington, D. C.).

Drinking: Necessity for pure water and pure milk; measures for protecting them from disease germs. Fruit juices, how obtained and protected from fermentation.

Story or reading:*

"Not long ago I was at the home of a friend where for supper we had the nicest grape juice I ever tasted. When I said, 'How good it is!' one of the little girls piped up, 'Billy and I picked the grapes, and sister made it all by herself. She learned how at cooking school.'

"When I was packing my suitcase to leave, this little girl brought out a big bottle of grape juice and wanted me to take it with me to remember her by. It was all beautifully sealed with wax and even this she had done by herself! Do you think I could have kept it that way very long? Perhaps not, it was so good; but if I had wanted it for a keepsake, I could have kept it sealed as it was, for years and years, and it would have been just as sweet and fresh as when it was given to me.

"Suppose, instead of keeping it in its bottle, I had poured it out into a glass. Can you tell me what would have happened to it then?

"In a few days little bubbles would have come, one after another, up to the top of the juice; and soon it would have been all full of bubbles. What causes the bubbles? Floating all about the air and sunshine are tiny specks called spores. These are to the tiny yeast plants what seeds are to other plants. Seeds fall into the ground and grow, but these yeast spores fall into the grape juice and grow. While they are growing in the grape juice, they eat what they want from the juice; and, as they eat, they make bubbles of carbon dioxide—which, you remember, forms in our lungs and looks like air—and, of another substance called alcohol. Of course, when they have changed the juice in this way, it tastes very different. It is then what we called fermented.

"Fermented drinks are harmful; but some people like bubbling drinks so much that they leave good, fresh grape juice open on purpose to let the little yeast plants get into it and make it into what we call wine. They treat apple juice in just the same way to make cider; and they even take fresh rye and barley and corn, and mash them up, and put yeast plants into the mash to ferment them and make them into whisky and beer. It does

*(By permission from "The Child's Day." Houghton Mifflin Co., Boston, Mass.

seem a pity, doesn't it, to take good foods like that and apples and grapes and make them into these things that really do us harm if we drink them."

Other Topics: Good Digestion. Simple facts about work and needs of stomach.

A strong heart. Location and work of heart. Exercise strengthens but over-exertion injures. Diseased conditions called "tobacco heart" and "beer heart," sometimes result from the use of tobacco and beer. No one intends to take enough of either when he begins, but one of their worst effects is to cause the user to crave increasing amounts.

"Tobacco Heart"

A physician to several boys' schools in San Francisco, California, says: ("The Tobacco Habit" by Bruce Fink, Ph.D., Miami University, Oxford, Ohio) "I am often called to prescribe for palpitation of the heart. In nine out of ten cases this is caused by the cigaret habit. Cigaret smoking gives boys enlargement of the heart, and it sends them into consumption and to the insane asylum."

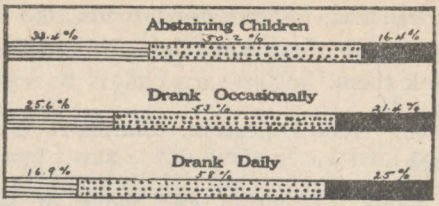
Breathing: Purpose, organs concerned in. How strengthened. Habits that weaken.

Moving: Parts of body necessary to motion (bones and muscles). Benefits of exercise, relation to food. Habits that weaken muscles and impair precision.

Thinking: Part of the body with which we think: how protected; how it gains power. Habits that impair good thinking and reduce mental strength.

The study in Holland was made upon a very large number of school children and with the aid of the Government in meeting the cost. This, too, showed that the standing of the children in their classes in school went down almost exactly as the amount of liquors they were allowed to drink went up.

The illustration which may be placed on the blackboard, shows the proportion of poor, medium and good scholarship in the three classes of children, (1) those who drank no alcoholic liquors of any kind, (2) those who drank beer or wine occasionally and (3) those who drank them daily.



Scholarship of 17,000 School Children in 1,000 Schools in Holland
Barred Sections, Good Scholarship
Dotted Sections, Medium Scholarship
Black Sections, Poor Scholarship

	Scholarship		
	Good per cent	Medium per cent	Poor per cent
Total abstainers	33.4	50.2	16.4
Occasional drinkers	25.6	53.0	21.4
Daily drinkers	16.9	58.0	25.0

The answers to the questions why the children were given alcoholic liquors showed that it was chiefly a matter of prevailing drinking customs or of routine. Those who drank occasionally did so chiefly on birthdays, at marriages, funerals, and on special days connected with farming operations, such as those when home-raised animals are killed for meat, sheep-shearing, harvest-end and cabbage-seed threshing.

Ignorance among parents as to the injurious effects of the use of alcohol by children and the idea that wine and beer are strengthening were given as explanations of the custom.

Effects of Tobacco

A teacher who noted that the odor of tobacco was often perceptible in school boys whose marks were low made an investigation of the smoking habits and the standing of pupils in grades below and in the high schools. He found that:

Of the graduates of the school not one was found to have been a habitual smoker while in school. Of the forty-five who had quit school all were habitual smokers and none were in good standing in their classes at the time they left school. The average grade of these in all studies was 60 per cent, six marks below the passing mark.

In the case of those students who had recently learned to smoke it was found that the time of acquiring the habit was registered by a slump in their marks.

The boys doing the best work in school had not taken to smoking. The average grade of ten with highest standing was 90.9 per cent. None of these used tobacco. The average grade of the best smokers was 78.9 per cent.

The habitual smoker was seldom found to be capable in sports and games. Thus there is nothing in athletics to hold him in school and when he finds himself a failure in class work as well he abandons the attempt to get an education.—(The School Review, November, 1912).

The physical has a very important place in a boy's conception of his ideal man. He not only admires athletes; he aspires to be an athlete. Whatever may be said about the use of tobacco by adults, there are few who doubt that the cigaret is harmful to the growing boy. The different forms of athletics and the ambition to "make the team" give emphasis to the need of "cutting out" the cigaret if the boy is to become a successful athlete.—W. C. Gordon, Ph. D., 1915.

Tobacco contains and depends largely for its effects upon considerable amounts of a substance called nicotine. This is a powerful poison. Enough is carried over in the smoke through the butt of the cigaret to injure the nervous system, especially in youth. It especially attacks the nerves supplying the heart, and is thus most harmful to growing boys. On account of its injurious effects upon the nerves of the heart, smoking has long been forbidden by trainers and coachers to athletes who are training for a contest or a race.—Woods Hutchinson, M. D., in "Handbook of Health."

Fifth and Sixth Years

Note: In these grades pupils will usually have text books.

The harm in home brew.

Self-control—Why it is difficult to exercise it in the use of alcoholic drinks which weaken self-control. Why total abstinence is the only safe rule.

Drunkenness not the test of the harm done by alcoholic liquors.

Why prohibition of alcohol is a health measure.

Why alcohol is a narcotic.

Pupils of this age have mastered the process of reading sufficiently to begin to read silently for information. Topics for

investigation can be assigned and the books provided in which the information can be found.

Seventh and Eighth Grades

Note: A more extended study with more comprehensive and advanced text books and a wider range of supplementary reading matter as sources of information are needed in these grades than in the preceding. Aim at preparing for intelligent citizenship. Many of the pupils will go no further and before leaving school should obtain enough knowledge of right hygienic living not only to maintain their own health and business efficiency, but to fit them for acting intelligently in the health affairs of their communities.

Special Topics to be Emphasized:

How Alcohol differs from Food.

How and why drink is a handicap to success in business as regards efficiency, fatigue, safety, thrift, relations of workers to each other.

The brain and nervous system as the masters of bodily life. Establishment of good mental habits. How alcohol strikes at the foundation of a well-ordered achieving life.

Community health; what the citizen can do to secure it. Why abstinence and prohibition are health measures. How alcohol reduces resistance to tuberculosis directly by physical effects; indirectly by taking money needed for healthful food, home and recreation.

Community and National Welfare: How abstinence promotes it.

Suggestions: Plan work that will familiarize pupils with significant facts and their application, such as essay writing, drawings to illustrate special points, gathering clippings and illustrative stories. Let the matter collected include incidents of human interest that will appeal to sympathy, arouse interest in and desire to help further the welfare of others.

In connection with United States history, interest pupils in the history of the temperance movement and in the numerous attempts to cure the drink evil by palliative legislation. Plan written work and drawings which pupils can take home to submit to parents as a means of carrying information into the homes.

A wider knowledge of the relations of alcoholic drinks to individual efficiency and community and national welfare than is

furnished in text books on physiology and hygiene is needed to prepare young people just leaving school to do their part in bringing public opinion into harmony with present knowledge of the effects of alcoholic drinks. Information not easily accessible to teachers on important points where there is general misconception of facts about alcohol is here included. Descriptions of experiments testing effects of alcohol will help give the pupils concrete illustration of truth.

Supplementary Notes

1. **Contrasts between Alcohol and Food.** (Use in connection with lessons on foods). The behavior of alcohol in the body is the opposite of that of true foods, as is shown by the following antithesis between alcohol and food:

Foods build up cells and tissues.

Alcohol disorders and disintegrates cells and tissues.

Food accelerates cell oxidation.

Alcohol slows cell oxidation.

Foods in excess of immediate needs can be stored in the tissues for future use when required.

Alcohol is not stored in the tissues, but circulates in the blood and other fluids until it is oxidized.

Food maintains the body temperature and aids the body in resisting cold.

Alcohol lowers body temperature under exposure to cold, and hastens death by freezing.

Food, particularly carbohydrate food, increases muscular power.

Alcohol diminishes power of muscular contraction.

Food aids resistance to disease.

Alcohol lowers resistance to disease.

Food promotes and is necessary to the growth of the young.

Alcohol tends to check growth and manifests injurious effects upon the young more markedly than on adults.

Food, when oxidized in the body, furnishes energy uncomplicated with a depressant or disintegrating effect on the body cells.

Alcohol, when oxidized in the body liberates energy, as do many other poisons so disposed of, but until oxidized exerts its characteristic depressant action on the cells to which it is carried during its slow oxidation.

Food is indispensable to the life of the body.

Alcohol is non-essential to animal life and, in proportion to the amount present, depressant, detrimental or destructive.

2. **Effects of Tobacco on Sport and Scholarship.** Dr. Frederick J. Pack, of the University of Utah, gathered evidence from twelve colleges and universities in all parts of the country on the effect of smoking by college students on athletic fitness, as shown in football "try-outs."

Six institutions furnished data about the try-outs. A total of 210 men contested for positions on the first teams. Of the non-smokers, 65.8 were successful; of the smokers only 33 per cent. In each of the six institutions the non-smokers far outstripped the smokers. In one institution not a single smoker obtained a place on the team.

In tests of lung capacity, the smokers, making due allowance for differences in age, and weight, had a lung capacity 9.4 per cent less than the non-smokers, a serious handicap to a man wishing to be a first-class player.

In scholarship, as in all previous studies, the smokers were inferior.

To the boy who wants to succeed in either athletics or scholarship, the conclusions of Dr. Pack are important:

1. Only half as many smokers as non-smokers are successful in the try-outs for football squads.

2. In the case of able bodied men, smoking is associated with loss in lung capacity of practically 10 per cent.

3. Smoking is invariably associated with low scholarship.—From a report in the Popular Science Monthly, October, 1912.

3. **Relation of Alcohol to Industrial Accidents.** Accidents in the various industries have been greatly reduced by laws compelling manufacturers to use safety devices on dangerous machinery; many companies take special pains to instruct workmen how to avoid accidents. But when all this has been done the final responsibility lies with the workmen themselves. The effects of small quantities of alcohol make the drinkers more clumsy in handling dangerous machinery, less alert to perceive danger, less prompt and accurate in deciding what to do in sudden emergencies, more inclined to take chances instead of exercising proper care in dangerous surroundings.

Experience has taught the managers of industry and big business that drinking men are more liable to cause and suffer ac-

cidents than are abstainers; more liable to spoil work and less reliable in every way.

Society at large all must pay some portion of the final drink bill of the man whose life is marred by alcohol. Perhaps the greatest of all harm is done by the squandering of money on an article which, whilst unfitting the drinker for work, degrades him to a condition of *poverty* which means want of the necessaries of life to those dependent upon him. Many thousands of instances of neglect and cruelty to children are known to occur annually and make it necessary for the public at large to care for these children either in their homes or in public institutions.

Slavery of the Tobacco Habit

One of the worst features of the use of tobacco is the hold which it, in common with alcoholic liquors and other narcotic drugs, soon fastens upon the users. They become extremely uncomfortable and even unable to do their regular work when deprived of their "pleasure-poison." A man who was trying to stop smoking declared that his craving for it was so strong that he would follow a man who was smoking half a mile in order to breathe the smoke that trailed behind him.

Note—Recommend the use of fruits and non-stimulating foods in overcoming the tobacco habit.

Narcotics

Another evil threatens our young people—that of drug addiction. Careful surveys made by the Department of Narcotic Drug Control of New York state and other investigations in various parts of the nation, prove conclusively that drug addiction is a growing menace to our children.

For this reason the State Department of Public Instruction of Colorado recommends to all superintendents, school directors and teachers, that some time be devoted in studying the results of these and other surveys, to the end that the young people in our schools may be warned of the evil inherent in the taking of drugs and of the very real menace of the commercialized attempts that have been and are being made to induce our children to partake of opium, any of its derivatives, or its first cousins, cocaine or heroin.

OUTLINE

OF

COMMUNITY ORGANIZATION

OUTLINES OF COMMUNITY ORGANIZATION

Aim:

Social.
Civic.
Recreational.
Vocational.
Cultural.

Types of Organization:

Parent-Teacher Association:
- Purpose.
- Scope.
- County Representation and Organization.

Community Clubs:
- Value.
- How to Organize.

Duty and responsibility of schools and teachers in fostering organization and furnishing leadership in communities:

How to organize a Community Party:
- Committees.
- Games.
- Refreshments.

Community Play Days and Civic Improvement Days:
- Arbor Day.
- Field Day.

Value of Community Organization and dangers of too small scope and too low aim:

Use of School Buildings.

The purpose of any community organization, no matter how large or small its scope, should be to give the individual members, both adults and children, a larger opportunity for self-expression along lines that will benefit the community or group socially, culturally, recreationally or vocationally.

There should be five definite aims in all community organizations, namely:

First: The social aim, that is social activities should be carried on that will make the individual members better members of society, in general, and to encourage each individual to function in the local community as a better co-operative individual. This aim should motivate in part all the activities of the community.

Second: Civic. Any organization growing up in a community

should hope to improve the civic beauty of the community, the health and morals of the group it serves and reach into the homes and uplift them in many ways.

Third: Recreational. This may find expression in entertainment of various sorts that have a highly cultural value, the Hallowe'en entertainment that is purely fun, the play festival, or an afternoon or evening spent in games and play. The social aim may be found indirectly in this type of activity. The old type of organization was of the short-sighted and purely recreational type and usually did not last long.

Fourth: Cultural. No matter what type of entertainment is given or what project is carried on in a community it should elevate the tastes and improve the attitude of the people for whose benefit or entertainment it is put on.

Fifth: Vocational. This should be the specific aim of certain projects that are carried on under the guidance of the community organization and the larger organizations with which they work.

There are two types of organization that are particularly suited to the communities and neighborhoods of Colorado. The first of these, The Parent-Teacher Association, has always been sponsored by the educational forces of the state and the different counties of the state who are adopting this excellent plan of organization in order to create closer co-operation between the home and the school. This organization may foster recreational activities, it is itself civic in aim and may to a certain degree aid in the vocational aim. It may also furnish the point of contact for educational, vocational, and recreational workers from outside the community. The purpose of any organization should be to broaden the contacts of the members and increase their usefulness.

The aim of the Parent-Teacher Association is given in the Handbook of General Information about Parent-Teacher Associations.

This little book issued by the Colorado Parent-Teacher Association is invaluable to groups or teachers wishing to organize a Parent-Teacher Association. It may be obtained from the Colorado Parent-Teacher Association, State Capitol Bldg., Denver, Colorado. It contains complete directions for organization and affiliation which are most important; constitution and by-laws of the organization, possible fields of helpfulness and activity, and a suggestive program for each meeting. Every school should have a Parent-Teacher Association unless some other established com-

munity organization is carrying on this work. For the small rural school or the separate building in a town or city system this is the best social, civic, and recreational organization that can be had.

A Parent-Teacher Association is one of the requirements for standardization for Rural Schools under the heading "Community Service." This association may foster and make effective all other activities under "Community Service". One organization should sponsor in a large way all the general activities of a community. It is usually unwise, particularly in a small community, to have more than one organization as division and competition rather than unity and co-operation result.

All Parent-Teacher Associations should be urged to affiliate with the State and Federal Associations in order to keep in line with the big national and state movements and to keep the aim of the Association forward-looking. Affiliation prevents in many instances local pettiness, boredom or stagnation. Every local Parent-Teacher Association should be represented in the County Council also as this, too, keeps the isolated community in active touch with all clubs in the county, keeps up interest and achievement and stimulates action.

The Community Club

The Community Club is slightly different in organization from the Parent-Teacher Association and carries out very effectively all five aims set forth above. It is very effective in well-established neighborhoods where strictly school lines should not be too closely drawn. In this type of club the welfare of the school and co-operation of the parents may be efficiently taken care of and all the needs of the community be cared for also. Many men and women take active interest and work tirelessly in a Community Club who do not feel actively interested in a Parent-Teacher Association, thinking it strictly a school organization.

The men of a certain rural club interested themselves in obtaining co-operation with county officials in building and surfacing some six miles of road in the community and in cutting down and rebuilding two dangerous grades. The entire community is building and equipping a club house where recreation of the young people and adults is systematically and efficiently cared for. Many Community Clubs carry on the Boys' and Girls' Club work which is purely vocational, handle the exhibit of the community at the county fair and co-operate with the Chamber of

Commerce in bettering the economic and social conditions of the communities. These clubs are organizing as corporate bodies with a perpetual board of nine directors, three of whom are chosen annually for a term of three years. The president is chosen by the board of directors from their number. In a county where many communities are organized in this way a central committee composed of one representative from each club is very helpful in deciding on general policies, plans and co-operative achievement for the group of clubs. This county board can arrange for excellent entertainment to be sent to each community or schedule speakers for the group of clubs. Rural people lack stimulative contacts, because, through lack of organization, available people have no opportunity of giving of their inspiration. Many fine speakers are available from our colleges if their expenses are paid. One club cannot afford to bear the expenses of a speaker alone but a group of clubs, through the work of a central committee and a corresponding secretary may bring to a group of rural communities people who leave splendid and lasting inspiration. One group of clubs, through co-operation, sent a speaker from the extension department of our own University to each club. The inspiration of the lecture on "Community Building" and the contact with a larger field is still yielding big returns after some five years, at an original cost of $9.10 levied on each club for expenses!

At another time this same group of clubs brought an excellent group of entertainers from Western State College. In the troupe were a dramatic reader, an instrumental quartet, a vocal quartet and a soloist. The expenses of the six young people were met co-operatively by the clubs at a total cost of $78.00.

The Agricultural College maintains an Extension Department of highly trained workers in many lines of work for the benefit of, and invaluable to, rural people. Experts in crops, animal husbandry, nutrition, clothing work and home improvement, canning, cooking and Boys' and Girls' Club work can be of much help to rural community clubs and these people are anxious to come in contact with such organizations in order to increase their service. These men and women are available for the work with men, women and juniors. In counties where a County Agent is maintained they may be scheduled in local communities through that office or in unorganized counties by writing to the Extension Department of the Colorado Agricultural College at Fort Collins. This work, vocational, civic, and cultural, is of lasting value.

The different portions of the state have different sources from

which to draw inspiration to the rural community. There is much valuable material in the community itself and every individual should have added chance for self-expression through club membership. Local ability and leadership should be developed and utilized, but too much effort is liable to make a great show for a while and then die out. By using outside talent and inspiration to supplement local effort, constant interest is obtained and larger objectives may be worked out.

Chambers of Commerce in towns surrounded by large agricultural sections, as well as business men's luncheon clubs have found it pleasant and mutually helpful to entertain and be entertained by the rural community clubs of one section. Much pleasanter business and social relations have grown out of this as well as better understanding and co-operation. The Chamber of Commerce of a thriving town assisted two community clubs to furnish the community club house and in turn were guests at excellent banquets at the respective community houses. In one instance the community house was a large basement of a two-room school.

Some valuable projects that may be undertaken individually or co-operatively by community clubs are hot lunches for schools, furnishing school buildings with the idea of making them a better community center, foster Boys' and Girls' Club work as a year's project in the community through furnishing leadership of local clubs, which must be done in co-operation with the County Agent or the Extension Department of the Agricultural College if the work is to be efficient and effective; provide playground apparatus and improve recreational opportunities of the entire community; civic improvement of grounds and buildings, of school houses or community centers; assist in the observance of holidays such as Armistice Day and Arbor Day and of National Education Week, National Music Week, and National Forest Week.

Leadership

Many communities are ready for organization and anxious to have it but lack leadership to accomplish it. The teachers, or teacher, in any rural community by virtue of their position become leaders of a community on election to a position in its schools, and are looked to by the citizens to fulfill this office.

How often the remark is made, "Miss ——— is certainly a good teacher. She is doing a great deal for the children and the community and is making things go." Miss ——— has exercised

her right to leadership by starting, through the school, community activities. You exert your prerogative when you invite the parents, the first week of school through your invitations written in language classes, to visit the school and get better acquainted. Again, you have drawn the community together and fulfilled a part of the aims given above when you invite the community to your Columbus Day Program. Organization is the next step and a very simple one.

If the community is not organized and wants to be, and you can easily tell by making casual inquiries, it is easy enough at the close of a school program to call the parents together and discuss organization. It may not take place at once but eventually it will if the sentiment of the community is not allowed to lag. Sometimes, if factions exist, it is well to ignore definite organization for a time; in the meanwhile, through general community activities under the auspices of the school, give each group some interesting and helpful work to do, until the welfare of the community as a whole becomes more important than a factional issue. Many factional issues arise because people of real ability do not have adequate opportunity for helpful self-expression or leadership. Every individual, child or grown-up, longs for self-expression and the approval of the group and with wise leadership in the community each one may find or be given something which he may help with that may result in general good. For the child it may be taking part in a game, helping to clean the school ground, or keeping the roadside clear of rubbish, or part in a play. For the adult it may be a place on a committee, leader of the game or a responsibility for the success of one part of a large community project.

Leadership is not bossing or doing all of the work alone or forcing public attention at all times. It is rather the faculty of giving a great many people an opportunity to help with a project for the good of the whole. While the community relies on the school to furnish leadership and inspiration, it is well to give the direct leadership to local people, letting your own ability for organization and inspiration give the leader an opportunity to act. It is not a good thing for a teacher, even though she may have organized a community, to become president of an organization for a great length of time. It is better to be secretary or chairman of a program committee, where you are in close touch with and can guide activities easily, than to be president; for the teacher goes on to a better position and the active leadership

is not taken away. It is well, though, if there is division, or sentiment, to be president if elected, and bring about co-operation, then pass on the active leadership. If factions are too clearly defined, organization is not feasible anyway.

The Board of Directors

In order to insure a permanent organization nine directors should be elected, three for three years, three for two years and three for one year. All members elected after the first year should be chosen for three-year terms.

President: Chosen by the board of directors from one of their number.

Secretary: Elected by the club.

Treasurer: Elected by the club, who shall become member of the board.

Standing committees appointed by the president for entertainment, program, press and publicity, resolutions, etc.

A Constitution to suit the needs of the club should be drawn and adopted.

In making a year's program all the needs and activities of the school and community should be evaluated and taken into consideration. Neighboring communities should be asked to co-operate in the large projects and it is always good to bring outside people in, during the first year especially, in order to broaden the contacts and enlarge the aim of the club. Do not neglect to provide for plenty of good clean fun and play, for both children and grown-ups. The citizens of rural communities do not play enough and greatly enjoy an evening spent purely in playing games if they are carried on correctly. If there is room the children should be accommodated in a room to themselves under a play leader at each meeting, where they can play under supervision while the grown-ups are having the meeting. Of course if the main part of the entertainment is put on by the school, as it should be in part of the meetings, the children and adults should be seated together.

How to Organize a Community Party

Usually a community party is the business of the program committee and the president of the club has appointed a refreshment committee separately so that the details of entertainment are all that fall directly to the program committee. If it is to be a large party of two or three hundred or a small one of fifty or

sixty it may be handled with the same general details. (It is taken for granted that in all organizations discussed, the school building is the meeting center. In this case it is impossible to give a party with seats in place as they are during school hours. Seats should be set around the walls in good order after the books have been taken out and stored. A good way to arrange this easily is to screw the seats to strips, three on a strip, instead of to the floor. They can be moved easily but will not get out of place and there will not be a time when seats are loose before or after an enetrtainment).

The committee should make a program of stunts, games, etc., for the whole evening, in detail, for their own use so that each may know exactly the order of each event. If games are to be played where pencils and pads, or other material need be provided, this should be the duty of one member of the committee. Most important—the members of the committee should decide on the games to be played and the order—being sure more games than it may be possible to play are included, in case some go off too fast, and then play each one before the party so that each member of the committee is sure of the game himself. If several people help with a game it is much more successful than if only one person knows it and attempts alone to teach it to a group.

Be careful to arrange for plenty of large group games and relays where a large part of the crowd play at once as this will keep interest at a high pitch. A few games for teams should be arranged at intervals so that the group players may have an opportunity to rest.

The books, "It Is To Laugh" and "Ice Breakers," by Edna Geister, and "Games For Playground, Home, School and Gymnasiums" will furnish material for games for a great many community parties. It is good to have such a party in the fall at about Hallowe'en time and one in the spring or late winter. An hour and a half crowded with fun followed by refreshments makes a very pleasant evening. Be sure to have games the adults will enjoy as rural people do not play enough. Many community grievances may be buried with hearty laughing during an evening of play.

During a year a great many splendid things can be done in a community. Your first work, if you are a new teacher in an unorganized community might be your Columbus Day Program. What a splendid opportunity to carry the thoughts of children

and parents back over the years and point out the wonderful progress made in 300 years! They will look out on America as better citizens after such a feast and you have fulfilled the social and cultural aim spoken of at the beginning of this outline.

Hallowe'en is a natural setting for a delightful party with games, songs and good times. Don't forget, too, to have some one give the history of the day for it has significance. Give the children an opportunity to help with the party and the young people of the neighborhood can be valuable.

American Education week occurs in November and every community should observe it. No taxpayer can fail to see the good of education when he helps observe this week.

Thanksgiving and Christmas, too, are logical times for community gatherings and the proper observation of these days is inspirational. An organized community should have a community Christmas and on both days the less fortunate should be thought of.

National resources, conservation, civic pride and citizenship find expression in the observation of Forest Week and Arbor Day. School grounds should be cleaned and tree planting done with proper observation of the day. Arbor Day may be made Civic Improvement Day for the whole community.

In March or April are good days for Athletic Days between the schools and the adults of the different communities. These Field Days may be inter-community sports or preliminary tryouts for a county athletic contest for schools only. Such field days bring about splendid spirit and co-operation.

The suggestions made above can be carried out in an unorganized community by any teacher with ability, natural or cultivated, for leadership. This is not a thing to be afraid to try out, in any sense of the word, but may become a joyful service. The biggest things of community betterment, however, must come through definite organization and the increasing co-operation by all members of the group. Civic Improvement, supervision and improvement of recreation, and community problem solving cannot be accomplished without an organization through which to work. This ought not to be revived from year to year or spasmodically but should be a fixed activity maintained from year to year. This organization should support every good activity in the community and inhibit every bad one.

Boys' and Girls' Clubs

No more valuable work can be done by the young people of the commonwealth than that done in the Boys' and Girls' Club Work. Improved practices in farming and stock-raising are demonstrated in the crop and stock clubs. Improved practices in home making and home keeping are demonstrated in the sewing and cooking clubs. The sewing clubs include elementary work in the first year sewing, and the advanced work includes the following projects:

Undergarments.
Care of Clothing.
Remodeling.
Hat Making.
Clothing Accounts.
Material for Clothing.
House Furnishings.

The leaders for these clubs are members of the local community and much of the work is done during the summer months. This work needs to be done under the leadership of some organization, and in co-operation with the County Agent if there is one and the Extension Department of the Agricultural College. Representatives from the Extension Department are able to do valuable work among the men and women of the community also. Since the greater part of the work is done during the summer months, the teacher should not undertake the leadership of a club as few teachers ever remain in a community during the summer.

Through the co-operation of the several communities of two counties one hundred and thirty club members were sent to a mountain resort for a two-day outing. The Extension Department sent a representative who gave instruction in getting demonstrations and finishing projects, the District Forest Service took charge one day and conducted a hike to a neighboring sawmill where valuable lessons in forest protection and conservation were learned.

These children gained new experience in co-operation during the days in camp. This work for the benefit of the citizens of tomorrow is cultural, civic, social and vocational and any community may profit much by fostering it.

A group of communities would get much profit and pleasure from a co-operatively owned moving picture machine of the port-

able variety or a good stereopticon. The Bureau of Visual Education of Colorado can supply the best in educational films and slides at a very nominal cost. One community could not finance such an undertaking alone or obtain enough material to make it worthwhile, but several could easily do so and schools and communities alike would receive invaluable benefit.

It is unnecessary to recount the advantages and benefits of a community organization but it is necessary to give a word of caution. Do not aim too low or live too much within the four walls of the neighborhood, so to speak, lest your organization grow tired and die or divide and die.

Study the needs of your community and let organization result from a feeling of need for it by the community itself. You may awaken the feeling and foster it, but let it be a creation of the community for better self-expression and bigger living.

Do not get the idea that your community must be organized like some other one, or must do exactly the same thing in exactly the same way. Let it be characteristic of the individual life and ideals of the group who compose it, always, however, seeking higher and better standards of attainment in all matters, social, civic, recreational and vocational. This will come with contact and co-operation with other clubs and people who bring big things to the club.

Last of all every teacher or worker in a rural community should know much about rural problems and needs. There are many books on rural problems. Two very good ones are: "Rural Education" by Brim, published by the Macmillan Company; and "The Rural Mind and Social Welfare' by Groves. There is much material on recreation that is valuable to anyone working in a community organization given in the bibliography. Learn to be a good game leader and love it. It helps to bring people together and helps them to understand each other better. If you do not genuinely love people and love to work with them and for them you will not be able to do much with organizing them.

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130 East Twenty-Second Street, New York City.
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GOOD ROADS

Since the public roads so closely affect our commercial conditions and our social and educational environment, there is every reason why the school boy and girl should be impressed with the importance of good roads, and be given an understanding of the elementary principles of road administration and construction.

A road is the means of internal communication and transportation between points in any country—a place where one may ride or drive; it is an open way appropriated for public passage and travel, for wagons or other vehicles, and is necessary to the good of every community.

Pupils in our public schools must be instructed in the elementary principles and practices of road-making, the beneficial effects of good roads to a community, and such other information on the subject of road construction and maintenance as will better fit them as men to help solve the perplexing road problem, now attracting the attention of our national, state and civic governments.

What Is a Road?—The origin and extension of roads. Explain the "trail" or "foot-path" of the pioneers and how they were evolved, by demand of traffic, into the wagon earth-road, the corduroy road, the plank road, charcoal road, gravel road, rock road, and on to the brick and concrete roads of today. What are state roads, county roads, neighborhood roads?

Value of Good Roads—What permanently improved roads, of whatever class, mean to a state, a county, a rural community. The spiritual, moral, social, commercial and educational benefits of good roads to the country neighborhood, and incidentally to the city. How it affects the rural mail delivery. How the purpose of good roads construction is to leave the imprint upon the child-mind—the man, contractor and road-builder of tomorrow—that good roads are an absolute necessity and must be built, as a church or school house must be provided for the public good.

What Makes a Good Road?—The proper location. Explain location. Why a map of a road is made and recorded. The neces-

sity of a profile, and how a profile is made; its necessity in intelligently estimating costs. Explain the grade percentages and how they are determined, and show by tables and charts the great loss in hauling over steep grades, and why and how steep grades should be reduced.

Drainage—The vital importance of drainage to any road—earth, wooden or metal surface. What drainage means—the proper methods of diverting or carrying off surplus surface water with the least damage to a roadway. Explain sub-drainage, and what causes necessitate sub-drainage in certain places and under certain conditions. Waterways or outlets—how to estimate required sizes of culverts or bridge openings to carry off natural water courses or rainfalls, etc. Drain ditches, side ditches, berm ditches. The importance of drainage to properly "crowned" road-beds.

Cross-Section—Explain the cross-section of a roadway. Its relation to the profile of the length of the road. Explain the various terms used in referring to the cross-section of a roadway, such as crown, berm, side ditches, berm ditches. How the widths of road-beds are determined, etc., and why some states have laws governing the widths of road-beds for permanent improved roads.

Road Construction and Maintenance—Explain methods of bidding on and letting road work by contract, etc. Why a bidder needs the map and profile of a road before bidding on same. How the cross-section helps a bidder. How let: by the whole or "lump," or by the cubic yard. Specifications—map, profile and cross-section made a part thereof by reference thereto. Explain cubic yard and how to calculate it. Contract and bond. Why the contractor should be familiar with the terms and methods used for calculating earth, rock or other road work. Study the method of staking out road work; how lengths of roads are measured by "stations," and why. Plus-stations, and why. The marking of center and side stakes. Draw diagrams of regular and irregular "cuts" and "fills". Explain why and when "grade pegs" are driven. Explain various methods of road construction and study the secret of the successful contractor, and what causes "failures." Necessity of rolling roadway, etc.

What is the meaning of road maintenance. The importance of prompt repairs, and why. What is meant by mechanical structures and the maintenance of same? The importance of opening drain ditches and other waterways. Mud holes and how treated.

Necessity of keeping the crowned road-bed in shape. Explain the terms "tight roof" and "dry cellar" in road talk. The sub-grade and its importance. The "split-log" drag and its early origin and use; its universal use today; its solution of the earth-road problem. Explain the advantages and disadvantages of wide and narrow tires, and high and low wheels, on wagons.

Improved Roads—Explain the meaning of the term "metal surface," as used by road-builders. Tell of the several earthroads —the wooden age in road-building—the corduroy, the charcoal, plank road, pike road or "turnpike" road. Describe the "turnstile." Tell of the old toll system, and for what the toll was used. Stone tramways, gravel roads, shale roads, shell roads, cobblestone roads, the macadam road, concrete roads. What is concrete, and how made? Proportions of cement, sand and rock, and why? Bituminous concrete; asphalt; how applied, etc. Binders and fillers in rock and brick roads, and what they affect. Oil as a preservative and dust-arrester in roads and streets.

Explain the connection between the conveniences of modern civilized life and good roads; also the relation between improved types of rural schools and good roads. Describe the connection between road building and the victories of both peace and war. Ask your classes to trace the old Roman military roads in Europe. Ask the children in what way good automobile roads in America contribute to the winning of the war.

Describe the difference between a good road for wagons and automobiles and a properly laid railroad bed. Try to arouse enthusiasm on the subject of good roads as a patriotic duty.

THE JUNIOR RED CROSS AS A PERMANENT EDUCATIVE AGENCY

This volume of the Course of Study for the schools of Colorado, would be incomplete without a re-statement of the vital function to be performed by the schools for the world, through the medium of the Junior Red Cross.

Though the Great War to end wars has long since come to a victorious conclusion, there is more need than ever for the second line of defense of the Nation's ideals and hopes—the school children—to continue to co-operate in supplying the needs of the world through the Junior membership. Years of reconstructive work lie before this and every other nation. For long years to come, the united, loving service of all American school children

will be necessary if the schools are to be vitally linked to life and made to serve as agents in the rebuilding of civilization.

The Junior Red Cross presents so many phases of activity and educative self-expression, that it makes its appeal to every child. Home and foreign service work offer avenues of self-expressive labor and loving service of which the children of America will surely always avail themselves.

Teachers have already found that Civics and Patriotism may be wonderfully well taught by means of the Junior Red Cross membership. This agency should continue to be so utilized, even after most of the evil effects of the war have been repaired. The Red Cross has always performed a great work in times of national disaster through famine, flood, fire, plague or any other great dislocation of the normal activity of nature or society. The Junior Red Cross can be made a part of this perpetual humanizing, self-sacrificing service.

I urge upon the teachers of Colorado the further organization of the Junior membership and the intensification of the work already begun, and I am certain that Colorado will greatly add to its already proud record in the forwarding of this—one of the greatest movements of the world.

Mary C. C. Bradford.

State Superintendent of Public Instruction.

BOYS' AND GIRLS' CLUBS

Organization

The organization of boys' and girls' clubs is simple. It is as follows:

School District Clubs

The teacher is the manager of the club.

The officers are generally a president, vice-president and secretary.

The club should include both boys and girls in its membership, generally known as The School Improvement Club.

The object of a club is to stimulate an interest in some particular line of work pertaining to the home and school life of the pupils.

A boys' club is generally an experiment club for work in some particular line in agriculture or manual training. A girls' club is usually a home culture club organized for some special line of work in domestic art, such as cooking, sewing or flower culture.

The names and addresses of the club members should be sent by the teacher to the county superintendent, and he should be informed of the nature of the work in which members are interested.

The work of the club is done largely at home, out of school hours, and during the summer vacation.

The time and character of the meetings, programs and exhibits of work done should be arranged by the teacher according to the nature of work undertaken.

County Organization

The county superintendent is the manager.

The clubs are generally known as Boys' Experiment Clubs, and Girls' Home Culture Clubs or Domestic Science Clubs.

A county meeting for organization is generally held to which teachers are asked to send elected delegates from their respective districts.

Officers are elected as in the district clubs.

The work taken up depends upon the agricultural and home interests of the county.

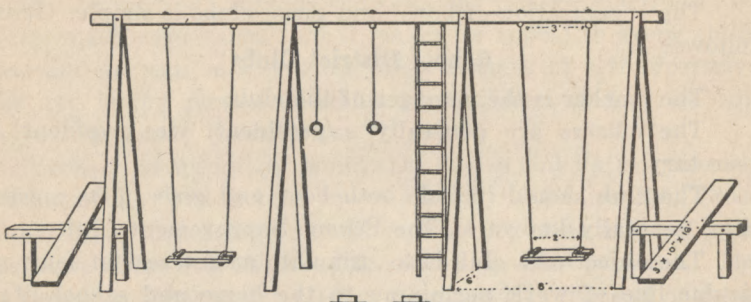
State Organization

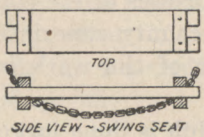
The state superintendent is manager of the state organization.

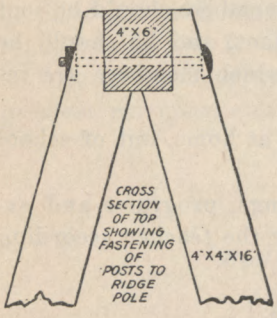
The officers are elected as in the county and district clubs.

The state manager works largely through the county managers. Full particulars are given on application to the state superintendent.

Playground Equipment for Rural Schools







NOTE

The above equipment was constructed by teacher and pupils at the Columbine School, Dist. No. 4, Delta Co., at the cost of $26.39 for all materials, including paint. It has proved to be strong, safe and very enjoyable to the children. It is very attractive and will last several years.

To School Boards and Teachers:

Dear Co-workers: I am submitting the accompanying guide toward the selection of playground apparatus of a standard type. These pieces of equipment are inexpensive and easy to make, yet answer the requirements of healthful recreation and play-exercise. They will meet the demands of the score card, entitling a school to three points toward standardization.

Trusting that these plans may be helpful to the school children—the chief asset of the State of Colorado, whose welfare should be your and my supreme object, I am,

Fraternally,

Mary C. C. Bradford.

State Superintendent of Public Instruction.