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AUTHOR   Nelson, JoAnne, Ed.: Hartl, David, Ed.
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ABSTRACT
                Designed by Washington curriculum specialists and
secondary teachers to assist teachers in small schools with the
improvement of curriculum and instruction and to aid smaller
districts lacking curriculum personnel to comply with Washington's
Student Learning Objectives Law, this handbook contains learning
objectives in the areas of language arts, reading, reading in content
areas, and mathematics for grades 9-12. Within each section, all
objectives are listed with a format designed to facilitate
personalization of the objectives to meet local district program
needs. Preceding each listing of objectives are two important pages:
one identifies the K-12 program goals for that subject and the other
identifies the scope of the subject and serves as a table of contents
for the listing of objectives. The first section of the book contains
a brief introduction, a general table of contents, a listing of Goals
for Washington Common Schools, an explanation of the format, and the
definition of terms used on the objective format pages.
(Author/CM)

APRIL 1979

SMALL SCHOOLS
STUDENT LEARNING OBJECTIVES

©HVAS

● Mathematics

GRADES 9-12

● Reading

● Reading in the Content Areas

● Language Arts

Dr. Frank B. Brouillet, State Superintendent of Public Instruction, Olympia, Washington

SMALL SCHOOLS

STUDENT LEARNING OBJECTIVES

9-12

Mathematics
Reading
Reading in the Content Areas
Language Arts

April 1979

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Washington.

Dr. Brank B. Brouillet
State Superintendent of Public Instruction

Dr. Jack Frisk
Deputy Superintendent

Dr. Monica Schmidt
Assistant Superintendent
Division of Instructional and Professional Services

William Radcliffe, Jr.
Director
Basic Education/Cultural Enrichment Program

Dr. Leslie Francis
Supervisor, Basic Skills

ACKNOWLEDGMENTS

Small Schools Planning Committee:
    Dr. David Hartl, Assistant Superintendent, C & I, ESD 189
    JoAnne Nelson, Coordinator, Small Schools Project, ESD 189
    John Thomas, Administrative Assistant, Arlington School District
    Eugene Elledge, Assistant Superintendent, Monroe School District
    Richard Bates, Teacher, Granite Falls School District
    Robert Estes, Director of Curriculum, Lake Stevens School District
    Nancy Whitson, Administrative Assistant, Snohomish School District
    Ron Hendricks, Vice-Principal, Stanwood School District
    Mary Riley, Vice-Principal, Sultan School District
    Loretta Sherrill, Teacher, Darrington School District
    Al Good, Principal, South Whidbey School District
    Gary Timmerman, Principal, Lakewood School District

Reading Objectives Committee (9-12)
    Joe Harley, Teacher, Arlington School District
    Rita Mauldin, Teacher, Darrington School District
    Marion Docter, Teacher, Granite Falls School District
    Peggy Mayer, Teacher, Lake Stevens School District
    Mary Smith, Teacher, Lakewood School District
    Norine Johnson, Teacher, Monroe School District
    Marlene Bodisilisch, Teacher, Monroe School District
    Jim Kriner, Teacher, Snohomish School District
    Jackie Olander, Teacher, South Whidbey School District
    Brenda Culbertson, Teacher, Stanwood School District
    Susanne Olson, Teacher, Sultan School District

Reading - Special Consultants
    Margaret Jackson, ESD 189
    Timothy C. Standal, University of Washington
    Katharine Mitchell, Edmonds School District
    Gloria Prevost, SPI
    Louise Danton, SPI and Ellensburg School District
    Chris Schaefer, Highline School District and University of Washington
    Jim Worthington, Seattle Pacific University

Language Arts Objectives Committee (9-12)
    Janet Pfeifer, Teacher, Arlington School District
    Loretta Sherrill, Teacher, Darrington School District
    Richard Bates, Teacher, Granite Falls School District
    Laura Kittleson-Madeo, Teacher, Lake Stevens School District
    Bob Fleming, Teacher, Lakewood School District
    Alicia Haberman, Teacher, Monroe School District
    John Boling, Teacher, Snohomish School District
    Frances Sanford, Teacher, South Whidbey School District
    Jennifer Leach, Teacher, Stanwood School District
    Don Good, Teacher, Stanwood School District
    Mary Riley, Teacher, Sultan School District

ACKNOWLEDGMENTS
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Special Consultants
     Charles Blondino, Director, Curriculum and Instruction ESD 121
     Jim Barcheck, Director of Instruction, Kent School District
     Kirby Naff, Teacher, Sultan School District
     Doris Hartl

Mathematics Objectives Committee (9-12)
     Steve Barker, Teacher, Arlington School District
     Emil Whitman, Teacher, Darrington School District
     Larry Martineo, Teacher, Granite Falls School District
     Ken Haakenstad, Teacher, Lake Stevens School District
     Ron Gann, Teacher, Lakewood School District
     Ed Lucero, Teacher, Monroe School District
     Larry Aalbu, Teacher, Snohomish School District
     Jim Gardner, Teacher, South Whidbey School District
     Alex Mesler, Teacher, Stanwood School District
     Richard Ambrose, Teacher, Stanwood School District
     Lowell Jonson, Teacher, Sultan School District

Special Consultants
     Alan O. Martin, Supervisor of Mathematics, Tacoma School District
     Dr. Charles Olson, Mathematics Coordinator, Everett School District
     William Raschkow, Mathematics Coordinator, Kent School District
     Elden Egbers, Supervisor, Mathematics/Metrics, SPI
     Dr. Ed. Beardslee, Seattle Pacific University
     John Plesha, Mathematics Consultant/Teacher (Retired),
        Edmonds School District

Editors
     JoAnne Nelson, ESD 189
     David Hartl, ESD 189

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INTRODUCTION

The Small Schools Project Objectives 9-12 were developed during the 1978-79 school year through the cooperative efforts of three levels of educational organization: ten Snohomish and Island County school districts, Educational Service District 189 and the State Office of Public Instruction. Funds were provided through Title IV C and SPI, with ESD providing in-kind services.

Process Procedure. ESD 189 personnel and selected curriculum specialists first identified objectives in three disciplines, language arts, mathematics and reading to serve as a basis for a goal based curriculum in the three disciplines. A cadre of secondary teachers from the ten consortium schools (Arlington, Darrington, Granite Falls, Lake Stevens, Lakewood, Monroe, Snohomish, Stanwood, Sultan and South Whidbey) then proceeded to use the objectives list as a base for curriculum development. The objectives listed in this document represent the final product of the curriculum specialists and secondary classroom teachers. The third phase will involve the classroom teachers writing activities to accompany the objectives. This curriculum will be published in three separate curriculum guides.

ORGANIZATION OF BOOK

As you will notice, this book is color coded with objectives for each subject listed on a different color of paper: Mathematics - blue, Reading - green, Reading in the Content Areas - white, Language Arts - yellow. All objectives are listed on pages with a format designed to facilitate personalization of the objectives to meet local district program needs. Within each colored section of the book, preceding the listing of objectives, are two important pages. One page identifies the K-12 program goals for that subject; and the other page identifies the scope of the subject and also serves as a table of content for the listing of objectives.

The white sheets at the front of this book contain not only a brief introduction, but also a general table of contents, a listing of State Goals for Washington Common Schools, an explanation of the format and the definition of terms used on the objective format pages.

The Tri-County Course Goals, produced by the Tri-County Goal Development Project, were used extensively in the Small Schools Project.

RELATIONSHIP TO THE SLO LAW

The purpose of this book and all other Small Schools materials is to assist
teachers with the improvement of curriculum and instruction. In addition,
it is expected that many smaller districts lacking curriculum personnel
will find this book helpful in complying with the SLO Law. (This law requires
districts to identify student learning objectives grades nine through
twelve in the area of language arts, reading and mathematics and initiate
implementation of such a program on or before September 1, 1981.)*

Contained within this book are many more objectives than any district would
choose to identify as their SLO objectives.

The approach of the Small Schools Project Consortium was first to develop
a curriculum, grades 9-12, in mathematics, language arts and reading using
a goal base model. Thus the objectives contained in this book, although
they may be helpful in meeting the intent of the law, were really designed
as instructional objectives and not specifically for the SLO Law. The
consortium also made a decision to develop a taxonomy of objectives for
each discipline 9-12 and deliberately chose not to develop objectives for
specific courses. Secondary teachers thus are free to choose objectives
from the taxonomy to build their specific courses in the discipline.

*See "Guide to the Student Learning Objectives Law," RCW 28A. 58.090
SPI, Olympia, Washington 98504.

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TABLE OF CONTENTS

GOALS FOR THE WASHINGTON COMMON SCHOOLS

1. As a result of the process of education, all students should have the basic skills and knowledge necessary to seek information, to present ideas, to listen to and interact with others, and to use judgment and imagination in perceiving and resolving problems.

2. As a result of the process of education, all students should understand the elements of their physical and emotional well-being.

3. As a result of the process of education, all students should know the basic principles of the American democratic heritage.

4. As a result of the process of education, all students should appreciate the wonders of the natural world, human achievements and failures, dreams and capabilities.

5. As a result of the process of education, all students should clarify their basic values and develop a commitment to act upon these values within the framework of their rights and responsibilities as participants in the democratic process.

6. As a result of the process of education, all students should interact with people of different cultures, races, generations, and life styles with significant rapport.

7. As a result of the process of education, all students should participate in social, political, economic, and family activities with the confidence that their actions make a difference.

8. As a result of the process of education, all students should be prepared for their next career steps.

9. As a result of the process of education, all students should use leisure time in positive and satisfying ways.

10. As a result of the process of education, all students should be committed to life-long learning and personal growth.

One unique feature of the Small Schools Curriculum is the format or arrangement of information on the page. The format was developed in order to assist districts in personalizing the curriculum to meet their own educational program needs.

The format pages contained within this book list the sequence of student learning objectives in the specific curriculum areas of Reading, Language Arts and Mathematics. On each page a grade placement has been recommended indicating where the objective should be taught. In grades 9-12, the grade recommendation has often been left open allowing districts to select and determine objective placement related to specific courses. Grade recommendations are made with the understanding that they apply to most students and that there will always be some students who require either a longer or shorter time than recommended to master the knowledges, skills and values indicated by the objectives.

Columns at the right of the page have been provided so district personnel can indicate the grade placement of objectives to coincide with the local district curriculum. The columns may also be used to indicate where an objective is introduced (I), practiced (P), reinforced (R), or mastered (M) within a district curriculum. An objective may be deleted by striking it from the list or another objective may be added by writing it directly on the sequenced objective page.

This book has been three-hole punched so that pages may be arranged within a notebook to parallel the district curriculum.

SKILL SCHOOLS PROJECT - Working Copy

1/22/79

SUBJECT: LANGUAGE ARTS
SPECIFIC AREA: Editing/Proofreading

The student knows:
- that most writing can be improved through effective editing.
- that one writes to communicate with others.
- that correct usage (punctuation, capitalization, spelling), exists to enable others to read accurately what the writer intended.
- that proofreading is a necessary step in producing a "finished" product which is free of errors in usage and mechanics

The student is able to:
- look objectively at personal writing.
- examine sentence structure, identify weaknesses, and revise sentences into more effective patterns.
- revise the order and structure of paragraph in order to improve a composition.
- identify the balance of content in the paper.
- examine the opening and concluding statements, examine paragraph transitions, identify and revise weaknesses.
- recognize and correct errors in usage, mechanical errors and misspelled words.

The student values:
- writing enough to care to improve it.
- editing as a means of improving writing.
- writing which is free of errors.
- correct usage, spelling, punctuation and capitalization in writing.

DEFINITION OF FORMAT TERMS

Subject indicates a broad course of study. The subject classifies the learning into one of the general areas of the curriculum, i.e., reading, mathematics, social studies.

Specific Area indicates a particular learning category contained within the subject. Within the subject of reading there exist several specific areas, i.e., comprehension, study skills, word attack skills.

State Goal indicates a broad term policy statement relating to the education of all students within the State of Washington. In 1972 the State Board of Education adopted 10 State Goals for the Washington Common Schools.

District Goal generally reflects the expectations of the community regarding the kinds of learning that should result from school experience. These goals are employed mainly to inform the citizenry of the broad aims of the school. When district goals are correlated to student learning objectives, community members are able to see how their expectations for schools are translated daily into the teaching/learning process of the classroom.

Program Goals are K-12 goals which do not specify grade placement. These goals provide the basis for generating subgoals or objectives for courses or units of study within a subject area. Program goals are used as a basis for defining the outcomes of an entire area of instruction such as mathematics, language arts or social studies.

Student Learning Objectives

The three major types of learning objectives which have been identified are knowledge, process and value objectives.

Knowledge Student Learning Objectives identify something that is to be known and begins with the words, "The student knows..." Knowledge objectives specify the knowledge a student is expected to learn. These objectives include categories of learning such as specific facts, principals and laws, simple generalizations, similarities and differences, etc.

An example of a Knowledge Student Learning Objective is: "The student knows guide words in a dictionary indicate the first and last words on the page."

Process Student Learning Objectives identify something the student is able to do and begins with the words, "The student is able to..." These objectives are associated with the rational thinking processes of communication, inquiry, problem solving, production, service and human relationships.

An example of a Process Student Learning Objective is: "The student is able to associate a consonant sound with the letter name."

Value Student Learning Objectives identify only the type of values which foster the context of the discipline. These objectives are thought to be most uniformly and consistently approved by society as supporting the major aims of the discipline.

An example of a Value Student Learning Objective is: "The student values reading as a worthwhile leisure time activity."

MATHEMATICS PROGRAM GOALS
(K-12)

1. The student values the study of mathematics for its use-
   fulness and application to everyday life...

2. The student develops the ability to communicate with
   precision and confidence using the vocabulary and
   symbols unique to mathematics.

3. The student develops the concept of number and numeration
   including counting, place value, reading and writing
   numbers, various numbering systems, number theory and
   scientific notation.

4. The student develops general mathematical concepts of
   time-space relationships; equality-inequality; measure-
   ment; function; graphs, charts and tables; probability,
   and statistics; and geometry.

5. The student develops accuracy in using the computational
   skills of adding, subtracting, multiplying and dividing.

6. The student develops the ability to use problem-solving
   techniques.

7. The student develops the knowledge and use of the structure
   of mathematical systems including whole numbers, integers,
   rational numbers and real numbers.

8. The student knows and is able to use the symbols, elements,
   operations and structure of the following number systems:
   whole numbers, integers, rational numbers, real numbers
   and complex numbers.

SMALL SCHOOLS PROJECT

MATHEMATICS

SCOPE
9 - 12

MAJOR AREAS

SMALL SCHOOLS PROJECT

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___COMPUTATIONAL SKILLS___

___Whole Numbers: Place Value___

	Page	Suggested Grade Placement		District	Placement		
		8	9	10	11	12	

The student knows:

. place value through billions in base ten numeration.

?.

REVIEW 9 - 12

The student is able to:

. read and write whole numbers up to billions.

. round numbers to the nearest ten, hundred, thousand, million, billion.

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: _____ COMPUTATIONAL SKILLS

	Page	Suggested Grade Placement	District Placement			
Whole Numbers: Addition / Subtraction			8	9	10	11	12

The student knows:

. and maintains knowledges, skills and basic facts of
   addition and subtraction (see Mathematics, Addition, K-8).   9-12

. subtraction is the inverse of addition.

The student is able to:

. complete any addition and subtraction problem in
   horizontal or vertical form.

. solve word problems involving addition and subtraction
   of whole numbers.

. check subtraction problems by addition.

The student values:

. the quick and accurate recall of addition and subtraction
   facts.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: ___ MATHEMATICS

SPECIFIC AREA: ___ COMPUTATIONAL SKILLS

			8	9	10	11	12
Whole Numbers: Multiplication							

The student knows:

- a factor is one of two or more quantities having a designated product.

- a product results when two numbers are multiplied.

- the product of any number multiplied by the factor of zero is zero (6 x 0 = 0).

- the product of any number multiplied by the factor of one is that number (3 x 1 = 3).

- the multiplication facts with products through 81 (mastery).

REVIEW 9 – 12

The student is able to:

- multiply any number by any number.

- multiply by 10's, 100's, 1,000's.

- solve word problems using multiplication.

The student values:

- the quick and accurate recall of multiplication facts.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
SUBJECT: MATHEMATICS							
SPECIFIC AREA: COMPUTATIONAL SKILLS							
Whole Numbers: Division			8	9	10	11	12

The student knows:

. that division is the inverse of multiplication.

. division is repeated subtraction.

. a dividend is a quantity to be divided.

. a divisor is the quantity by which the dividend is to be divided.

. the quotient is the quantity resulting from division of one quantity by another.

.. the remainder is the dividend minus the product of the divisor and the quotient.

.. basic division facts (mastery).

REVIEW

9 - 12

The student is able to:

.. divide two, three and four digit numbers by one, two or three digit numbers with or without remainders expressed as whole numbers.

. divide two, three and four digit numbers by one, two or three digit numbers with or without remainders expressed as fractions or decimals.

. check a division problem by using multiplication.

.. estimate the quotient in a given division problem.

. solve word problems involving division.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: COMPUTATIONAL SKILLS

                 Rational Numbers: Fractions

	Page	Suggested Grade Placement	District Placement			
		8	9	10	11	12

The student knows:

- any integer can be expressed as a fraction.
- a fraction consists of a numerator (which is on top) and a denominator (which is on the bottom) with the line between as a symbol which means divide.
- proper fractions have numerators which are less than the denominator.
- improper fractions have numerators greater than or equal to the denominator.
- mixed numbers (forms) consist of a whole number added to a proper fraction.

REVIEW

9 – 12

The student is able to:

- identify and write fractions to represent parts of a region.
- identify and write fractions to represent an uncompleted division of two numbers.
- write a fraction for part of a set.
- find fractions that are equivalent to given fractions.
- order fractions with like denominators.
- locate a fractional number on a number line.
- change mixed forms to improper fractions.
- change fractions to simplest forms.
- add and subtract fractions with like denominators.
- add and subtract mixed forms with like denominators.
- add and subtract fractions with unlike denominators.
- add and subtract mixed forms with unlike denominators.
- multiply fractions (proper and improper) by fractions and/or by whole numbers.
- divide fractions.
- divide mixed forms.
- solve word problems involving fractions using any combination of operations.

The student values:

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement			District Placement		

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___COMPUTATIONAL SKILLS___

	Page		8	9	10	11	12
Rational Numbers: Decimals			8	9	10	11	12

The student knows:

. . decimals are another way of expressing a fraction.

. . our money system is based on decimals.

REVIEW
9 - 12

The student is able to:

. read and write decimals to hundred thousandths.

. express a decimal in expanded form to hundred thousandths,
e.g., $.438 = \frac{4}{10} + \frac{3}{100} + \frac{8}{1000}$.

. express the expanded form of a fraction in decimal form,
e.g., $\frac{4}{10} + \frac{3}{100} + \frac{8}{1000} = .438$

. order decimals on number line.

. round decimals up to ten thousandths.

. add, subtract, multiply and divide decimals to hundred thousandths.

The student values:

SUBJECT: MATHEMATICS

SPECIFIC AREA: COMPUTATIONAL SKILLS

            Rational Numbers: Ratios, Percentage, Proportion

	Page	Suggested Grade Placement	District Placement
		8	9	10	11	12

The student knows:

- a ratio is a way of comparing two numbers by division, e.g., the ratio of a to b is $\frac{a}{b}$.

   (Suggested Grade Placement: REVIEW 9-12)

- a ratio can be expressed in the following forms:
   a to b or $\frac{a}{b}$.

- a percent is defined as a ratio with denominator of one hundred and is denoted by the symbol %,
   e.g., 50% is $\frac{50}{100}$.

- a proportion is a statement of equality between two ratios,
   e.g., $\frac{2}{4} = \frac{6}{12}$.

- in a proportion, the cross-products are equal, e.g., for
   b and d $\neq$ 0, $\frac{a}{b} = \frac{c}{d}$ implies ad = bc..

The student is able to:

- rename any rational number as a percent, e.g., .05 = 5%;
   .5 = 50%; $\frac{3}{4}$ = 75%; 2 = 200%; $1\frac{1}{2}$ = 150%.

- rename a number in percent form as either a fraction or
   decimal, e.g., 100% = 1.00; 75% = .75 = $\frac{3}{4}$ = $\frac{(75)}{100}$;
   150% = $\frac{3}{2}$ = $\frac{(150)}{100}$ = $1\frac{1}{2}$ = 1.5; $33\frac{1}{3}$% = $\frac{1}{3}$ = .333...

- solve the three types of percentage problems: a% of b = c:
   a. given a and b, find c (find 25% of 60).
   b. given b and c, find a (what percent of 90 is 45?)
   c. given a and c, find b (25 is 50% of what number?)

- solve for the missing value of a given proportion,
   e.g., $\frac{8}{X} = \frac{2}{7}$.

- solve simple word problems involving percent: interest,
   commission, compound interest, % of change, discount,
   price.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement			District Placement		
SUBJECT:	MATHEMATICS							
SPECIFIC AREA:	MEASUREMENT SKILLS							
	System International (S.I.) and English Linear		8	9	10	11	12

The student knows:

. System International prefix meanings: milli--.001;
  centi--.01; deci--.1; deca--10; hecto--100; kilo--1000.

. millimeter, centimeter, decimeter, decameter, hectometer,
  kilometer are derived from the S.I. prefixes and base
  unit meter.

. commonly used abbreviations.

. common English linear units of measure are: inch, foot,
  yard, mile.

The student is able to:

. measure lengths using S.I. and English units of measure.

. estimate lengths using both systems.

. convert linear measure to another unit of measure within
  the same system (inches to feet; meters to centimeters).

The student values:

REVIEW
9 - 12

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SMALL SCHOOLS PROJECT

SUBJECT: _____MATHEMATICS_____

SPECIFIC AREA: _____MEASUREMENT SKILLS_____

_____S.I. and English Capacity_____

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

The student knows:

- that liter is the basic unit of S.I. measurement,

- that milliliter, centiliter, decileter, decaliter, hectoliter and kiloliter are S.I. units of measure derived from the S.I. prefixes and the base unit liter.

- commonly used abbreviations.

- basic English units of capacity measurement are cup, pint, quart and gallon.

REVIEW

9 - 12

The student is able to:

- measure capacity using S.I. and English units of measure.

- estimate capacity using S.I. and English system.

- convert capacity measure from one unit to another within the same system (cups to quarts, milliliters to liters, etc.)

The student values:

-12-

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: MATHEMATICS

SPECIFIC AREA: MEASUREMENT SKILLS

S.I. and English: Weight (Mass)		8	9	10	11	12

The student knows:

- gram is the base unit of S.I. measurement.

- milligram, centigram, decigram, decagram, hectogram, kilogram are derived from the S.I. prefixes and base unit gram.

- commonly used abbreviations for weight.

- basic English weight units of measure are ounce, pound, ton.

REVIEW 9 - 12

The student is able to:

- convert from one unit to another in the same system.

- measure the weight of an object using a balance scale in both English and S.I.

- estimate weight using English and S.I.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: MEASUREMENT SKILLS

Temperature: Celsius and Fahrenheit

Page	Suggested Grade Placement			District Placement	
	8	9	10	11	12

The student knows:

- degree Celsius is used to measure temperature in the S.I.   REVIEW 9 - 12

- the symbol for Celsius is C.

- common temperature references: 0°C. is freezing point of water; 20°C is room temperature; 37°C is normal body temperature; 100°C is boiling point of water.

- the symbol for Fahrenheit is F.

- common temperature references in Fahrenheit: 32°F= freezing point of water; 68°F is room temperature; 98.6°F is normal body temperature; 212°F is boiling point of water.

The student is able to:

- read a thermometer in both Celsius and Fahrenheit.

- calculate differences in degrees.

- estimate approximate temperature conversions from Celsius to Fahrenheit.

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: MEASUREMENT SKILLS

	Page	Suggested Grade Placement		District Placement		
Money / Time		8	9	10	11	12

The student knows:

- the basic units of money covered in K-8: penny, nickel, dime, quarter, half-dollar, dollar.

- common denomination of bills: one, two, five, ten, twenty, fifty, hundred, five hundred.

- the basic units of time: seconds, minutes, hours, days, week, month, year, decade, century.

REVIEW 9 - 12

The student is able to:

- read and write any money amount.

- count change beginning with a specified amount.

- solve word problems involving money, using the four basic operations.

- estimate money.

- convert a unit of time to another unit (hours, minutes, seconds, days, weeks, months, years).

- compute time intervals between two given times.

- read time charts (schedules, time zones, time clock).

- solve word problems.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___PRACTICAL APPLICATIONS___

	Page	Suggested Grade Placement		District Placement		
Graphs		8	9	10	11	12

The student knows:

. a graph is an organized collection of information.　　　　　　11-12

. there are various types of graphs: pictographs, bar, line,
broken line, circle.
(see objectives p. 109 Small Schools K-8)

The student is able to:

. tabulate collected data in rank order.

. plot tabulated data.

. read and interpret data on pictographs, bar graphs,
line graphs, and circle graphs.

. construct pictographs, bar graphs, line graphs, and circle
graphs from given or collected data.

The student values:

. graphs, as a source of information.

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SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS _____

SPECIFIC AREA: ___ PRACTICAL APPLICATIONS ___

	Page	Suggested Grade Placement		District Placement		
Personal Finances		8	9	10	11	12

The student knows:

- various sources of income, e.g., employment, investments.   11-12

- that a budget is a systematic approach to planning future spending, saving, and investment income.

- checking account services vary from one financial institution to another.

- world currency exchange rates vary from time to time.

The student is able to:

- solve practical problems using basic operations.

- keep records of personal income, savings and expenditures.

- prepare a personal budget.

- plan spending for food, clothing and services to obtain the greatest value.

- solve problems related to sales tax.

- solve problems related to income tax.

- read personal payroll statement and reconcile it with gross earnings.

- manage a personal bank checking account (complete form, make deposits, keep and balance records).

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: ___ PRACTICAL APPLICATIONS

	Page	Suggested Grade Placement		District Placement		
Personal Finances: Credit and Interest		8	9	10	11	12

The student knows:

. common types of housing available and the advantages/ . — **11-12**
disadvantages of each (single family residence, apartment,
condominium, etc.).

. ways in which federal and state laws regulate credit
(e.g., credit card regulations, truth in lending laws).

. sources of credit and methods of establishing credit.

. advantages and disadvantages of credit buying.

. interest on savings accounts vary depending on type of
account and type of financial institution (certificate
account, treasury notes, commercial banks, savings and
loan associations, credit unions).

. fees for bank services vary from commercial banks and
savings and loans.

. formula for computing interest and its components:
$i = prt$.

The student is able to:

. determine the cost of credit given the cost of the item
purchased, the monthly payments and the number of
payments.

. compute interest (simple or ordinary) for periods of one,
two, three years, etc.).

. recognize and compute simple and compound interest.

. identify the components of a mortgage payment, e.g.,
interest, principal, property tax, insurance.

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: _____ PRACTICAL APPLICATION

Personal Finances: Insurance

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

The student knows:

. that insurance is a method of providing protection against   11-12
losses incurred as a result of death, accident, damage,
loss of salary, etc.

. that there are various types of health and life insurance
available with distinct advantages based on age of insured
health, size of family, income.

. that there are various types of automobile insurance
available with distinct advantages based on age, health,
and driving record.

. that automobile insurance can include different kinds of
coverage, e.g., collision, personal liability, property
damage, fire and theft.

. homeowners insurance covers buildings, personal property,
household belongings.

The student is able to:

. compare and select appropriate types of personal insurance
based on needs, e.g., term vs. whole life, group vs.
individual health insurance.

. compare and select appropriate types of auto insurance.

. compare and select appropriate type of homeowner's
insurance.

The student values:

. insurance as a form of protection from financial disaster.

		Page	Suggested Grade Placement		District	Placement		
SUBJECT:	MATHEMATICS							
SPECIFIC AREA:	PRACTICAL APPLICATIONS							
	Ratios, Proportion, Measurement Formulas, Percent			8	9	10	11	12

The student knows:.

- formulas to compute distance, area, perimeter, volume. .   [Page: 11-12]

The student is able to:

- apply formulas for calculating perimeter, area, volume of common spaces, objects and containers.

- solve practical word problems involving whole numbers,. fractions, decimals, and percent: interest, commissions, percent of change, discount, price (see Rational Numbers K-8 Objectives pages 92-95).

- use ratios, proportions and percent to increase, decrease, and relate measures of distance, cost, time, quantity, rate, weight, area, volume and temperature.

The student values:

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SUBJECT: MATHEMATICS

SPECIFIC AREA: PRACTICAL APPLICATIONS

	Page	Suggested Grade Placement	District Placement			
Use of Calculators			8	9	10	11	12

The student knows:

. that electronic calculators are economically useful tools in solving everyday problems.   11-12

. the importance of estimating before working problems using an electronic calculator.

The student is able to:

. do fundamental operations using a calculator (+,-,X,÷).

. perform a series of arithmetical operations using a calculator to solve everyday problems.

. use estimation in checking problems using a calculator.

The student values:

. the skill of estimation.

SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: _____ ELEMENTARY ALGEBRA

	Page	Suggested Grade Placement			District Placement		
Language of Algebra - Sets and Symbols		8	9	10	11	12	

The student knows:

. symbols commonly used in the study of elementary algebra. | 8-10

. how to order the real numbers on the number line.

The student is able to:

. identify:
   elements, subsets, intersection of sets, union of sets,
   empty sets, equivalent sets, infinite sets, finite sets,
   disjoint sets, complement of sets.

. specify sets by roster, rule and graphing.

. express the relationships of sets through Venn diagrams.

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: _ELEMENTARY ALGEBRA_

	Page	Suggested Grade Placement		District Placement		
Variables, Open Sentences and Evaluating Expressions		8	9	10	11	12

The student knows:

- meaning of variable, constant, coefficient, exponent, term base, solution set, symbols of inclusion and open sentences. `8-10`

The student is able to:

- simplify rational algebraic expressions.

- evaluate algebraic expressions by substitution of variable

- simplify expressions containing symbols of inclusion.

- add, subtract, multiply and divide rational algebraic expressions.

- translate a verbal problem into an algebraic expression.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: ___ ELEMENTARY ALGEBRA

		Page	Suggested Grade Placement		District Placement			
Axioms of Addition and Multiplication of Real Numbers				8	9	10	11	12

The student knows:

- the additive and multiplicative (reciprocal) inverses of real numbers. | 8-10

- the identity elements of real numbers.

The student is able to:

- identify the axioms of closure and equality and the commutative, associative and distributive axioms.

- identify the additive and multiplicative inverses of algebraic expressions.

- determine the absolute value of a real number.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: ELEMENTARY ALGEBRA

	Page	Suggested Grade Placement		District Placement		
Single Variable Equations and Inequalities		8	9	10	11	12

The student knows:

. how to add, subtract, multiply and divide real numbers. | 8-10 |

The student is able to:

. solve single variable equations and inequalities.

. use single variable equations or inequalities to solve verbal problems.

. graph solution sets of single variable equations and inequalities.

. combine inequalities and graph their solution set.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: ELEMENTARY ALGEBRA

	Page	Suggested Grade Placement					District Placement
Polynomials		8	9	10	11	12	

The student knows:

- the rules of exponents, e.g.:   [Page: 8-10]

$$b^m \, b^n = b^{m+n}$$

$$\frac{b^m}{b^n} = b^{m-n}$$

$$b^{-m} = \frac{1}{b^m}$$

$$b^0 = 1$$

The student is able to:

- identify monomial, binomial, trinomial and polynomial.
- determine the degree of a monomial.
- determine the degree of a polynomial.
- add, subtract, multiply and divide polynomials.
- factor a polynomial, e.g.:
  - common monomial
  - difference of squares
  - perfect square trinomial
  - general trinomial
- identify common monomial factors.
- solve polynomial equations by factoring.
- solve verbal problems by use of factoring techniques.
- apply rules of exponents for a power of a power, e.g.,
$$(b^m)^n = b^{mn}$$

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement			District Placement		
SUBJECT:	MATHEMATICS							
SPECIFIC AREA:	ELEMENTARY ALGEBRA							
	Rational Expressions and Open Sentences		8	9	10	11	12	

The student knows:

. how to reduce rational numbers to lowest terms. 8-10

. how to find lowest common denominators for rational numbers.

. division by zero is undefined.

. definition of ratio, proportion and percent.

The student is able to:

. add, subtract, multiply and divide rational algebraic expressions.

. simplify complex functions.

. solve fractional equations and inequalities.

. solve problems involving ratios, proportions and percents.

The student values:

SUBJECT: MATHEMATICS

SPECIFIC AREA: ELEMENTARY ALGEBRA

	Page	Suggested Grade Placement			District Placement		
Graphs - Functions and Relations		8	9	10	11	12	

The student knows:

• the meaning of coordinates in a plane. 8-10

• how to graph ordered pairs.

• there is a one to one correspondence between the set of real numbers and set of points on a number line.

• there is a one to one correspondence between the set of points in a plane and ordered pairs of numbers.

The student is able to:

• identify relations and functions including their domain and range.

• graph linear equations in two variables.

• determine the slope and y-intercept.

• determine the equations of lines from points and slopes.

• graph quadratic relations.

• graph inverse variation.

• use inverse variation to solve problems.

The student values:

40.

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: ELEMENTARY ALGEBRA

	Page	Suggested Grade Placement		District Placement		
Systems of Linear Equations - Two Variables		8	9	10	11	12

The student knows:

The student is able to:

. solve systems of equations by graphing, by addition and by substitution.

. use systems of equations to solve problems.

. graph systems of inequalities.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___ELEMENTARY ALGEBRA___

Rational and Irrational Numbers				8	9	10	11	12

The student knows:

. the set of rational numbers is a proper subset of the reals. _   8-10

. the Pythagorean Theorem.

The student is able to:

. determine that $\sqrt{a^2} = |a|$ for any real number a.

. extract the square root of a non-negative real number.

. identify a rational number as a real number which can be expressed in the form $\frac{a}{b}$, a and b integers, $b \neq 0$.

. identify irrational numbers as real numbers which cannot be expressed in the form $\frac{a}{b}$, a and b integers, $b \neq 0$.

. simplify radical expressions.

. solve radical equations.

. add, subtract, multiply and divide radical expressions.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___ELEMENTARY ALGEBRA___

				8	9	10	11	12
Quadratic Expressions								

The student knows:

- the quadratic formula. · · · · · 8-10

- how to complete the square.

The student is able to:

- solve quadratic equations by using the quadratic formula.

- solve quadratic equations by completing the square.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED ALGEBRA

	Page	Suggested Grade Placement					District Placement
Review of Elementary Topics		8	9	10	11	12	

The student knows:

- how to state, recognize, and use the ordered field properties.   *(Page: 10-12)*

- how to add, subtract, multiply, divide and raise to a power using real numbers.

- how to simplify rational algebraic expressions.

- how to solve single variable equations and inequalities and graph their solution sets.

- how to add, subtract, multiply, divide and factor polynomials.

- how to add, subtract, multiply and divide rational algebraic expressions.

The student is able to:

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___ADVANCED ALGEBRA___

___Irrational Numbers and Radicals___

	Page	Suggested Grade Placement		District Placement		
			8	9	10	11	12

The student knows:

. how to identify rational and irrational numbers. `10-12`

. how to simplify radical expressions.

. how to add, subtract, multiply and divide radical expressions.

. each positive number has two real square roots, zero has one real square root and negative numbers have none.

. each real number has exactly one real cube root.

The student is able to:

. solve quadratic equations by completing the square and by using the quadratic formula.

. solve problems in variation.

. determine the principal n^{th} roots of selected integers.

The student values:

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
SUBJECT: MATHEMATICS							
SPECIFIC AREA: ADVANCED ALGEBRA							
Quadratic Relations and Systems			8	9	10	11	12

The student knows:

- how to determine the distance between two points in a plane.   10-12

- how to determine the equations of lines in a plane given points and slopes.

The student is able to:

- determine equations of lines that are mutually perpendicular or parallel.

- graph second-degree relations in two variables.

- identify the conic sections and their distinguishing properties.

- write the equations for the conic sections.

- use the system of quadratics to solve problems.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
				8	9	10	11	12

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED ALGEBRA

                  Exponential and Logarithmic Functions

The student knows:

. how to solve equations involving exponents.   10-12

The student is able to:

. solve exponential equations, e.g., $5^{4x-1} = 5^{x+5}$.

. identify inverses of relations.

. convert from exponential to logarithmic form.

. use the rules of logarithms, e.g.,

$$\log_b x\,y = \log_b x + \log_b y$$

$$\log_b \frac{x}{y} = \log_b x - \log_b y$$

. use tables of logarithms to solve problems.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED ALGEBRA

Sequence and Series

	Page	Suggested Grade Placement		District Placement		
			8	9	10	11	12

The student knows:

· a sequence is an ordered set of numbers. (Page 10-12)

· a series is the sum of the terms of the sequence.

· symbols of summation.

The student is able to:

· identify arithmetic and geometric sequences.

· identify a series as a sum of terms in a sequence.

· find the nth term and sum of the terms of an arithmetic or geometric series.

· find the sum of an infinite geometric series.

· use arithmetic and geometric series to solve problems.

· use the symbols of summation, e.g., $\sum_{K=1}^{10} (3+2K)$

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: ___ ADVANCED ALGEBRA

Matrices and Determinants

	Page	Suggested Grade Placement			District Placement	
		8	9	10	11	12

The student knows:

- how to solve two equations in two variables by addition, by graphing, and by substitution.   *(Page: 10-12)*

- an array is a rectangular arrangement of numbers.

- the dimensions of a matrix are indicated by rows and columns.

The student is able to:

- solve three equations in three variables by addition, by substitution, and by graphing.

- locate x, y, z intercepts in x, y, z coordinate equations.

- use determinants in solving systems of equations.

- add and subtract matrices.

- multiply matrix by scalar.

- multiply matrices.

- use matrices to solve two equations in two unknowns.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: _____ ADVANCED ALGEBRA

	Page	Suggested Grade Placement		District Placement		
Polynomial Functions and Complex Numbers		8	9	10	11	12

The student knows:

. complex numbers are ordered pairs of numbers.   10-12

. that the symbol "i" has the property such that $i^2 = -1$.

. the standard form $a + bi$ expresses a complex number.

. the discriminant of the quadratic equation is symbolized by $b^2 - 4ac$.

The student is able to:

. simplify radicals whose radicand is negative.

. find all complex roots of polynomial functions.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___ADVANCED ALGEBRA___

___Trigonometry___

	Page	Suggested Grade Placement					District Placement	
		8	9	10	11	12		

The student knows:

- the definitions of the six trigonometric functions as they relate to a right triangle.   11-12

- the definition of the radian.

- relationships of the sides in the $30^{\circ} - 60^{\circ} - 90^{\circ}$ and $45^{\circ} - 45^{\circ}$ triangles.

- the laws of sines and cosines.

- standard position of an angle.

- the definition of inverse relations.

The student is able to:

- use tables of trigonometric functions to solve problems.

- graph trigonometric functions.

- prove trigonometric identities.

- solve trigonometric equations.

- convert from polar to rectangular coordinates and vice versa.

- find the missing parts of triangles using trigonometric formulas.

- convert radian to degree measure and vice versa.

- graph the inverse trigonometric relation.

- determine the principal range of the inverse trigonometric relation.

- use De Moivre's theorem to find powers and roots of a complex number.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT:	MATHEMATICS	Page	Suggested Grade Placement	District Placement				
SPECIFIC AREA:	ADVANCED ALGEBRA							
	Permutations, Combinations and Probability			8	9	10	11	12

The student knows:

. definition of a factorial. ▲ — 10-12

. a permutation is an arrangement of objects in a definite order.

. a combination is an arrangement of objects without regard to order.

The student is able to:

. find the number of permutation of n objects taken r at a time.

. find the number of combinations of a set of n objects taken r at a time.

. compute probability of a simple event.

. expand a binomial using the binomial theorem.

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: GEOMETRY

	Page	Suggested Grade Placement					District Placement
As A Mathematical System		8	9	10	11	12	

The student knows:

- that a mathematical model is an abstract system devised by people to help understand physical phenomena.   *(Page 9-11)*

- that geometries can be developed solely by rules of logic, independent of physical world appearances.

- that Euclidean and non-Euclidean geometries exist.

- that mathematically valid deductions are dependent on the assumptions (axioms, or postulates) and will change as the assumptions change.

- inductive reasoning: taking specifics and coming up with a generalization.

- deductive reasoning is reasoning from accepted facts to a conclusion.

- the math system is composed of:
    undefined terms (e.g., point line plane)
    defined terms
    assumptions (e.g., axioms or postulates)
    theorems

- the parts of a formal proof (i.e., figure, given, to prove and body of proof).

The student is able to:

- distinguish between inductive reasoning and deductive reasoning.

- recognize a definition that is good (both concise and precise) and is able to write the ones common to Geometry.

- write formal proofs.

- develop a geometrical argument in either the indirect or direct method of proof.

The student values:

- analytical and critical thinking as an important tool in today's society.

SMALL SCHOOLS PROJECT

		Suggested Grade Placement		District Placement		

SUBJECT: _____ MATHEMATICS _____

SPECIFIC AREA: GEOMETRY _____

Congruence and Similarity

Page		8	9	10	11	12

The student knows:

- similar figures have the same shape.   [Page: 9-11]

- congruent figures have the same size and shape.

- that corresponding parts of congruent figures are congruent.

- that corresponding sides of similar figures are proportional and the corresponding angles are congruent.

- the minimum requirements for congruence of triangles (SSS, SAS, ASA).

- the minimum requirements for similarity of plane figures.

- the properties of different kinds of quadrilaterals.

- the Pythagorean Theorem.

The student is able to:

- apply the standard Euclidean geometry theorems to prove pairs of triangles congruent; prove corresponding parts of congruent triangles congruent; and prove properties of other polygons, e.g., opposite angles of a parallelogram are congruent.

- apply the Pythagorean Theorem and its corollaries in the solution of problems.

- apply properties of ratio and proportion in the solution of problems.

The student values:

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement	District Placement			
				8	9	10	11	12

SUBJECT: MATHEMATICS

SPECIFIC AREA: GEOMETRY

Triangle Inequality

The student knows:

- the sum of any two sides of a triangle is greater than the third side.   9-11

- the relation between sides and angles of a given triangle.

- the algebra of inequalities (i.e., addition, subtraction, multiplication, and division; e.g., if $a > b$ and $c < 0$, then $ac < bc$)

The student is able to:

- find the range of values for the third side of a triangle given two sides.

- use inequalities in formal proofs.

- graph inequality relationships.

The student values:

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement	District Placement			

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: ____ GEOMETRY
Angle Relationships/
Parallelism and Perpendicularity

		8	9	10	11	12

The student knows:

- that an angle is the union of two rays with a common endpoint.   9-11

- that parallel lines do not intersect and are coplanar.

- that perpendicular lines form right angles.

- that angles may be classified by size (e.g., acute, right, obtuse, straight).

- definitions pertaining to:
      angle
      parallel lines
      perpendicular lines
      classification of angles according to size
      adjacent angles
      vertical angles
      complementary angles
      supplementary angles, corresponding angles,
      alternate interior angles

The student is able to:

- establish the relationship existing between angles, e.g., supplementary, complementary, vertical, adjacent, interior, linear pairs.

- apply the standard Euclidean geometry theorems in order to establish the parallel or perpendicular relationship between lines or planes, e.g., corresponding angles, alternate interior angles.

- apply the standard Euclidean geometry theorems in order to draw conclusions about angle relationships, given parallel or perpendicular lines, e.g., alternate exterior angles, complementary angles.

- determine angle measurements in polygons.

- determine angle measurement in problems involving supplementary angles.

The student values:

- care and neatness in drawing or constructing figures for the purpose of identifying apparent relationships by measurement.

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SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: ___ GEOMETRY

Retention of Algebraic Skills/
Coordinate Geometry

			8	9	10	11	12

The student knows:

- that certain mathematical ideas may be represented algebraically or geometrically, e.g., linear equations and their geometric representations.   (9-11)

- the formula for mid-point of a line segment.

- the formula for distance between two points in a plane.

- the definition of slope.

- a vertical line has no slope.

- parallel lines have the same slope.

- the product of the slopes of two perpendicular lines is negative one.

The student is able to:

- graph a linear equation in two variables by (a) slope and y-intercept, (b) both intercepts, (c) point and slope, or (d) a set of points.

- determine algebraically when two or more lines are perpendicular, parallel, coincide, or intersect.

- find the equation of a given line.

- use the methods of coordinate geometry to prove theorems of plane geometry.

- apply the skills of first year algebra in evaluating expressions, solving equations.

- apply the mid-point, slope and distance formulas in problem solving.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___GEOMETRY___

Circles, Arcs, Angles, Spheres

			8	9	10	11	12

The student knows:

. the definitions pertaining to circles and spheres
   (e.g., circle, sphere, arc, tangent, chord, secant,
   diameter, radius, central angle, inscribed angle,
   minor arc, major arc, inscribed, circumscribed).

9-11

The student is able to:

. apply the relationships in congruence of circles, arc,
   chords, central angles, inscribed angles, etc., to prove
   theorems and solve problems, e.g.,
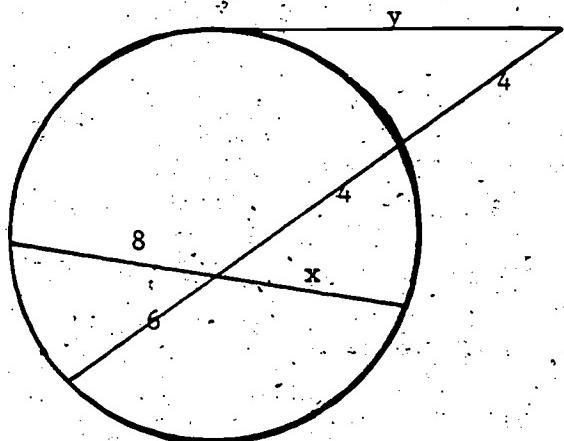
find x: $8x=24$
         $x=3$

find y: $\dfrac{14}{y} = \dfrac{y}{4}$

         $y = 2\sqrt{14}$

.. find the measures of angles, segments and arcs formed by
   tangents, chords, and secants of a circle.

The student values:

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: _____MATHEMATICS_____

SPECIFIC AREA: ___GEOMETRY_____

			8	9	10	11	12

_____Constructions and Loci_____

The student knows:

- that a geometric construction is made by using only a compass and a straightedge.   9-11

- that a locus of points is the set of all points and only those points which satisfy certain conditions.

The student is able to:

- perform basic Euclidean construction, including:
   the perpendicular bisector of a segment,
   an angle bisector,
   the fourth proportional to three given segments,
   a triangle, given its three sides,
   a rhombus, given a side and one angle,
   angle congruent to a given angle,
   line parallel to a given line through a point not in the given line,
   line perpendicular to a given line through a point not on the given line,
   line perpendicular to a given line through a point on the given line,
   proportional division of a segment,
   segment congruent to a given segment,
   tangents to a circle from an exterior point,
   construct a segment whose length is the geometric mean of the lengths of the two given segments.
   circumscribe a circle around any triangle,
   inscribe a circle in any triangle.

- find, by construction, the incenter, circumcenter, ortho-center, and centroid of a given triangle.

The student values:

			Page	Suggested Grade Placement		District Placement				

SUBJECT: MATHEMATICS

SPECIFIC AREA: GEOMETRY

				8	9	10	11	12

Elementary Transformations

The student knows:

- that geometric transformations make up one category of mathematical functions.   9-11

- that congruence is related to transformations called isometries.

- that composites of transformations operate on sets of points in a manner similar to the way in which composites of algebraic functions operate on sets of numbers.

- that similarity is related to size transformations (contraction or expansion).

The student is able to:

- find the image of a set of points under a simple reflection (flip).

- find the image of a set of points under a translation (slide).

- find the image of a set of points under a contraction or expansion.

- find the image of a set of points under a rotation (turn).

- identify the center, magnitude, and direction of rotations.

- identify the magnitude and direction of a translation.

- find the pre-image of a point.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement			District Placement		
SUBJECT:	MATHEMATICS							
SPECIFIC AREA:	GEOMETRY							
	Area and Volume		8	9	10	11	12	

The student knows:

- how to distinguish between formulas of length, area, and volume. — page 9-11

- the formulas of perimeter and area of triangles, parallelograms, and regular polygons.

- the formula for area and circumference of circles.

- the formula for surface area and volume of prisms, cylinders, pyramids, cones, and spheres.

The student is able to:

- use formulas of area and volume in problem solving.

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: GEOMETRY

Trigonometry

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

The student knows:

    the relationship between right triangle trigonometry and similarity in geometry.   9-11

    definitions of sine, cosine and tangent ratios.

    side length ratios in 30° right angle and 45° right triangle.

The student is able to:

    find the value of the sine, cosine and tangent of a labeled angle in a right triangle, given lengths of its sides.

    use a table of trigonometric values in order to find the sine, cosine, and tangent of given angles.

    find the lengths of two sides of a right triangle, given the third side and one acute angle.

    find the measure of an acute angle of a right triangle, given the lengths of two of its sides.

    solve word problems requiring the writing and solving of a trigonometric equation.

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: __ ADVANCED TOPICS

	Page	Suggested Grade Placement		District Placement	
		8	9	10	11	12

Trigonometry

The student knows:

- the definitions of the six trigonometric functions.   11-12
- the different systems of angle measurement.
- De Moivre's theorem is used to find powers and roots of complex numbers in polar form.
- the six functional values of the special angles and their multiples, i.e., $0°$, $30°$, $45°$, $60°$, $90°$, etc.

See Trigonometry for Geometry and Advanced Algebra.

The student is able to:

- convert from one system of angle measurement to another. (radians, degrees).
- define and illustrate a directed angle on a circle and in the rectangular coordinate system.
- derive and verify identities involving reciprocal, quotient, Pythagorean, sum and difference, and double angle relations and formulas.
- solve equations and inequalities involving circular and trigonometric functions.
- apply the law of sines and law of cosines to solutions of triangles.
- solve equations and inequalities involving inverse circular and trigonometric functions.
- perform the basic operations, find powers and roots of complex numbers in both standard and polar forms.
- find the areas of a triangle by using different formulas, e.g. $A = \frac{ab \sin C}{2}$, $A = \frac{1}{2}bh$, $A = \sqrt{s(s-a)(s-b)(s-c)}$.
- use the calculator to solve problems involving the six trigonometric or circular functions.
- sketch graphs of the six trigonometric functions and their inverses, giving the domain and range of each.
- determine the amplitude, period and phase shift and range of the function $Y = Y_1 + AT(BX+C)$ where T is one of the trigonometric functions and Y_1 is some constant value.

The student values:

	Page	Suggested Grade Placement		District Placement		

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED TOPICS

	Page	8	9	10	11	12
Analytic Geometry						

The student knows:

- the slope of a line is the ratio of change in y to the change in x: $m = \dfrac{y_1 - y_2}{x_1 - x_2}$ — Page 11-1

- definition of eccentricity.

- that the graph of a quadratic equation of the form $x^2 + y^2 + Dx + Ey + F = 0$ is a circle.

- definition of conics involving locus of points.

- that the graph of $Ax^2 + Bxy + Cy^2 + Dx + Ey + F = 0$ is a conic section (ellipse, parabola, hyperbola, circle, line).

- see Graphs — Functions and Relations Elementary Algebra.

The student is able to:

- find the distance between two points.

- determine an equation of a line given: 2 points or 1 point and a slope.

- determine if two lines are parallel.

- determine if two lines are perpendicular.

- use the methods of analytic geometry to prove theorems of plane geometry.

- identify a conic section, given its equation.

- analyze and graph the equation of a conic section.

- find the equation and sketch conic sections, given particular characteristics, e.g., foci, directrix, vertices, asymptotes.

- graph and interpret data in both rectangular and polar form.

- convert rectangular coordinates to polar coordinates and conversely.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement			District	Placement	

SUBJECT: _____ MATHEMATICS _____

SPECIFIC AREA: ___ ADVANCED TOPICS _____

				8	9	10	11	12

_____ Logic _____

The student knows:

- the truth values of conditionals, converses, inverses, contrapositives, conjunctions, disjunctions, negations.

| 11-12 |

The student is able to:

- recognize the hypothesis and conclusion of a conditional statement.

- use the contrapositive of a statement to prove the statement.

- form the converse of a given statement.

- use truth tables to analyze and prove the relationships of statements, e.g., biconditionals, tautologies.

- form the negation of given statements.

- analyze a syllogism's truth or falseness.

The student values:

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement					District Placement
		8	9	10	11	12	

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___ADVANCED TOPICS___

Probability and Statistics

The student knows:

- that permutations and combinations are useful for arranging data to compute probabilities of events. **(Page 11-12)**

- the meaning of symbols and terms associated with combinatorial mathematics (e.g. factorial, $n^c r$, $n^p r$).

- the relationships between the coefficients in the binomial expansion and Pascal's triangle.

- the summation definition for the binomial theorem:

$$(a + b)^n = \sum_{k=o}^{n} \binom{n}{k} \cdot a^{n-k} b^k$$

- common measures of variability of data, e.g., range, standard deviation, variance, quartiles, stanines, percentiles.

The student is able to:

- calculate the number of combinations or permutations for a stated condition.

- expand a binomial expression to a positive integral power using the binomial theorem.

- find the nth term of a binomial expansion.

- compute the probability of outcomes of ordinary uncertain events (e.g., tossing coin, rolling dice).

- compute the probability of mutually exclusive or independent events.

The student values:

			Page	Suggested Grade Placement		District Placement		

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED TOPICS

	Page	8	9	10	11	12
Matrices and Determinants		8	9	10	11	12

The student knows:

- that a matrix is a rectangular array of numerals. — 11-12

- conditions which must be satisfied for matrices to be added or multiplied.

- that the determinant associated with each square matrix is a number (scalar).

- definition of the inverse of a matrix.

- see Matrices and Determinants - Advanced Algebra

The student is able to:

- add, subtract, and multiply conformable matrices.

- determine if a square matrix has an inverse.

- find the multiplicative inverse of a nonsingular square matrix.

- solve matrix equations.

- compute the determinant of a square matrix.

- represent a system of equations with a matrix.

- use Cramer's Rule to solve systems of equations.

- solve a system of linear equations by using matrices.

The student values:

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	MATHEMATICS						
SPECIFIC AREA:	ADVANCED TOPICS						
	Sequences and Series (Extended)		8	9	10	11	12

The student knows:

   that a series is the indicated sum of a sequence.   11-12

   that if S is the set of natural numbers and if $1 \in$ S, and
   $X + 1 \in$ S, whenever $X \in$ S.
   then S contains all the natural numbers.
   (Principle of Mathematical Induction)

   see sequences and series for advanced algebra.

The student is able to:

   find the limit of a sequence if it exists.

   determine whether a given sequence is convergent or
   divergent.

   prove theorems by using mathematical induction.

   write the sum of a series by using summation notation (Σ)

   see sequences and series for advanced algebra.

The student values:

	Page	Suggested Grade Placement		District Placement		

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED TOPICS

			8	9	10	11	12
Polynomial Functions							

The student knows:

- that if $P(x) \div (x-r)$, then $P(r)$ is the remainder (Remainder Theorem). — 11-12

- that if $P(r) = 0$, then $x-r$ is a factor of $P(x)$ (Factor Theorem).

- the Fundamental Theorem of Algebra.

- that, if $P(x)$ is a polynomial in x and if $P(a)=0$, then a is a zero of the polynomial and $x-a$ is a factor.

The student is able to:

- apply the Remainder Theorem to evaluate a polynomial for any real number.

- apply the Factor Theorem to find factors of a polynomial.

- use synthetic division to find the quotient and remainder when $P(x)$ is divided by $(x-r)$.

- apply the Rational Roots Theorem.

- use Descartes' Rule of Signs to determine the bounds on the number of positive, negative and total possible roots.

The student values:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED TOPICS

	Page		8	9	10	11	12
Vector Theory			8	9	10	11	12

The student knows:

. that vectors are directed line segments used to represent
quantities having magnitude and direction.   11-12

. the symbols common to vectors, e.g., scalar (a),
vector (c̄), dot product (˙).

. that any two or three dimensional vector can be repre-
sented respectively as an ordered pair or triple of real
numbers (a,b) or (a,b,c).

. the definition of displacement of a vector.

. the definition of cross product.

. the vector product (cross product) can be calculated using
determinants.

The student is able to:

. find the norm (magnitude) and direction of a vector with
respect to a coordinate axis.

. determine if vectors are equivalent.

. add and subtract vectors, both graphically and
algebraically.

. determine the resultant of a system of vectors both
graphically and algebraically.

. find the direction cosines of a given vector.

. find the inner (dot) product of two vectors.

. use inner (dot) product to determine if vectors are
perpendicular or parallel.

. write equations of lines and segments in vector form
and parametric form.

. rename a vector with either polar or rectangular
coordinates.

The student values:

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

SUBJECT: ___MATHEMATICS___

SPECIFIC AREA: ___ADVANCED TOPICS___

___History of Mathematics___

The student knows:

- factors contributing to the development of numeration symbols (numerals) and number systems. —— 11-12

- that modern mathematics has origins in early civilizations (e.g., Babylonian, Hindu, Egyptian, Greek, and Roman).

The student is able to:

- trace the development of positional number systems.

- state contributions of certain outstanding mathematicians, (e.g., Archimedes, Euclid, Pythagoras, Newton, Leibnitz, Pascal.

- state reasons for the development of deductive mathematical systems in contrast to systems based on observation and experimentation.

- cite recent studies and findings that shed new light on the nature or uses of mathematics in prehistory.

The student values:

- the central role of mathematics in technological advances throughout history.

SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: ADVANCED TOPICS

Calculus

	Page	Suggested Grade Placement			District Placement	
		8	9	10	11	12

The student knows:

- concepts of real numbers, analytic geometry and functions. | 11-12

- the definition of limit and can apply it to define differentiation.

- the definition of continuity.

- relationship between the derivative and the slope of a function

The student is able to:

- solve inequalities with absolute value using the properties of real numbers.

- evaluate the limit of an expression.

- use the rules of differentiation to differentiate algebraic and transcendental functions.

- apply differentiation to graphing, related rates and extreme value problems:

- use limits and series to define integration.

- use the formulas of integration to integrate algebraic and transcendental functions.

- solve area, volume and length problems by using the various methods of integration.

- solve problems of a physical nature such as work, mass, liquid pressure, etc., by using techniques of differentiation and/or integration.

The student values:

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SMALL SCHOOLS PROJECT

			Page	Suggested Grade-Placement		District Placement		
SUBJECT:	MATHEMATICS							
SPECIFIC AREA:	COMPUTER TOPICS							
	Computer Literacy / Computer Hardware / Flowcharting			8	9	10	11	12

The student knows:

- that there are many computer-related jobs. — 11-12

- the function of each of the keys on a standard computer input terminal.

- the distinguishing characteristics of an electronic digital computer.

- some of the advantages of use of computer systems over other systems of treating data.

- some of the limitations of computers.

- that many electronic devices contain computers.

- some positive and negative ways in which computers affect people.

The student is able to:

- turn on a standard computer input terminal and to log on and off a computer.

- determine when solutions to given problems would most efficiently be helped by a calculator, personal computer, or large computer system.

- run a "canned" program on the computer.

- draw and interpret the shapes used in flowcharts.

- construct a flowchart defining a common everyday activity (e.g., dialing a telephone).

- construct a flowchart as a step in writing a program to solve a problem.

The student values:

- both the power and the limitations of the electronic digital computer.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement			District Placement	

SUBJECT: _____ MATHEMATICS

SPECIFIC AREA: _____ COMPUTER TOPICS

		8	9	10	11	12
BASIC Language / FORTRAN Language		8	9	10	11	12

The student knows:

. the elements of the BASIC language. — 10-12

. the BASIC language has limitations, and the advanced languages (FORTRAN, COBOL) are necessary for certain computer jobs.

The student is able to:

. write, execute and debug a BASIC program.

. write, execute and debug a FORTRAN program.

. trace programs written in BASIC or FORTRAN.

. collect and organize data in a way that will facilitate solutions to a problem by computer.

. distinguish between real and integer mode variables and will know the results of operations in these modes.

. demonstrate proper application of accepted programming techniques.

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: MATHEMATICS

SPECIFIC AREA: GENERAL STUDY TECHNIQUES

	Page	Suggested Grade Placement	District Placement			
			8	9	10	11	12

The student knows:

. terminology, syntax and symbols pertinent to mathematics.   9-12

. there are logical sequences to problem solving.

. explanations and story problems must be read carefully
at a slow rate, and then reread.

. a study technique such as SQ, RQ, CQ may help clarify
problems.

The student is able to:

. follow directions to solve problems.

. identify relevant and irrelevant details in problems.

. read and understand charts, graphs, tables and diagrams.

. translate prose into mathematical sentences.

. translate mathematical sentences into prose.

. estimate and predict solutions.

. determine what was asked for in a problem.

. employ multiple strategies to solve problems.

. check final answers against estimates.

. carefully check computations.

The student values:

. mathematical insight in problem solving.

SMALL SCHOOLS PROJECT

READING PROGRAM GOALS
(K-12)

1. The student desires to read and through self-initiative, seeks out reading for pleasure and knowledge.

2. The student develops a functional reading level to satisfy personal, social, educational, environmental and vocational needs and interests.

3. The student possesses word recognition skills (visual discrimination, auditory discrimination, phonetic analysis and structural analysis) necessary to read.

4. A. The student's vocabulary is expanded through involvement in reading.

   B. The student possesses an appreciation for the power of words and proffeiency in the use of words.

5. The student possesses listening skills necessary for development in reading.

6. The student possesses comprehension skills necessary to understand, interpret, evaluate and respond to printed materials when reading both orally and silently.

7. The student possesses study reference skills necessary to satisfy personal, social, educational, environmental and vocational needs and interests.

8. The student possesses general reading study techniques which promote optimum learning in content area subjects.

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: READING

SPECIFIC AREA: WORD RECOGNITION

			8	9	10	11	12
Contextual Analysis							

The student knows:
- that contextual analysis is the primary approach to word recognition and vocabulary development through oral and written language.   [Page: 9-12]
- that contextual analysis involves the student's personal knowledge of language as it relates to the way the language is used by the writer.
- that there are many different types of contextual analysis clues depending upon the (word recognition) situation, i.e.,
  - Direct Explanation Clue – An outright explanation of the meaning of a word given to the reader.
  - Experience Clue – Indirect experience through reading and other learning.
  - Mood or Tone Clue – Meaning of a word harmonizes with author's tone.
  - Explanation Through Example – An example that illustrates the meaning.
  - Summary Clue – Reason out meaning by circumstances summing it up.
  - Synonym or Restatement Clue – Meaning inferred from repeated idea nearby.
  - Comparison or Contrast Clue – Meaning derived from word or idea already known.
  - Familiar Expression or Language-Experience Clue – Using familiar common language patterns to infer meaning.
  - Words In A Series Clue – Meaning derived from a composite of all previous clues except explanation.
  - Inference Clue – Meaning derived from a composite of all previous clues except explanation.

The student is able to:
- use the context for the purpose of getting the meaning of an unknown word or assigning the appropriate meaning to a word having multiple meanings.
- read unknown words by using context clues in combination with structural analysis and phonic clues.
- use different types of context clues (e.g. direct explanation clue, experience clue, summary clue) as an aid to getting meaning.

The student values:
- the use of context and structural analysis as tools for expanding ones vocabulary.

SMALL SCHOOLS PROJECT

SUBJECT: READING

SPECIFIC AREA: WORD RECOGNITION

	Page	Suggested Grade Placement		District Placement		
Structual Analysis: Root Words, Affixes		8	9	10	11	12

The student knows:

· the meaning of common Latin and Greek root (base) words. | 9-12

· the meaning of prefixes and how they affect the meaning of the root word.

· the meaning of suffixes and how they affect the meaning of the root (base) word.

· suffixes change the part of speech of root (base) word.

The student is able to:

· use root (base) words to build word meanings.

· use common Latin and Greek roots as an aid to getting meaning.

· use knowledge of prefixes and suffixes as an aid to decoding and increasing word meaning.

The student values:

· universality of many terms.

· contribution of other languages to the English language.

· the fact that language is in a constant state of change.

SMALL SCHOOLS PROJECT

SUBJECT:

SPECIFIC AREA: WORD RECOGNITION

Phonic Analysis

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

The student knows:

    the basic phonic generalizations used in word recognition.   9-12
    (See K-8 objectives for Word Recognition.)

The student is able to:

    . use phonic generalizations as an aid in word recognition.

The student values:

    . the use of phonic generalizations in combinations with
    contextual and structural analysis clues in recognizing
    unknown words:

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement			
				8	9	10	11	12

SUBJECT: READING

SPECIFIC AREA: VOCABULARY

The student knows:

- many words in our language have been derived from names or borrowed from different languages.   9-12
- that an extensive knowledge of word meanings aids in precise communication.
- each subject has a specialized vocabulary.
- that individual words have denotative (literal) meanings.
- that individual words may convey a connotative (personal, emotional) meaning.
- that homographs are words that are spelled the same but have different derivations and meanings, and may differ in pronunciation, e.g., fair (market)/fair (just): object (noun)/object (verb).
- an acronym is a word formed by initial letters of words in a set phrase.
- the dictionary and thesaurus are resources for building vocabulary meaning.

The student is able to:

- expand general vocabulary through involvement in reading.
- recognize words used denotatively and derive their literal meanings.
- recognize words which convey connotative or emotional meanings.
- determine pronunciation and meaning of homographs.
- recognize and interpret acronyms and abbreviations.
- use the dictionary for appropriate definitions and usage.
- use the thesaurus to locate synonyms, antonyms and specialized vocabulary.

The student values:

- and appreciates the power of words.
- an expanding vocabulary as an aid to understanding and communication.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
SUBJECT: READING

SPECIFIC AREA: COMPREHENSION

				8	9	10	11	12
Punctuation								

The student knows:-

- that punctuation marks are an aid to comprehension.   9-12
- the comma is used to set off the name of a person spoken
  to, an explanatory phrase, and/or separate items in a
  series.
- an exclamation mark signals strong feelings.
- the dash signals a longer pause than that signaled by the
  comma.
- the ellipsis (...) signals an interruption in thought or
  conversation.
- the parenthesis signals an explanation of the preceding
  word or adds information.
- the colon signals an explanation or list will follow.
- the semicolon can be used in place of a connecting word
  such as "and" or "but."
- the words between double quotation marks are usually the
  exact words someone said or the title of a story, article,
  poem or song.
- single quotation marks are used around the exact words
  someone has said, or the title of a story, article, poem
  or song when these are mentioned within the speech of
  another story character.
- an apostrophe signals a contraction or ownership.

The student is able to:

- use punctuation marks as an aid to getting meaning in
  silent and oral reading.
- determine in context the specific meaning indicated by
  the end punctuation of the sentence (period, exclamation
  point, question mark).
- determine the meaning signaled by commas, i.e.:
      setting off name of person spoken to
      setting off words spoken by someone
      setting off explanatory phrases
      separating items in series
      used with the appositional or
- determine whether quotation marks are used to indicate
  words spoken or to identify special names or titles.
- determine whether the apostrophe signals a contraction or
  a possessive.

The student values:

- an understanding of the use of punctuation as an aid to
  comprehension.

SMALL SCHOOLS PROJECT

		Suggested Grade Placement					District Placement
	Page		8	9	10	11	12

SUBJECT: READING

SPECIFIC AREA: COMPREHENSION

Literal

The student knows:

- clue words, e.g., first, then, while, before, after, are an aid to noting sequence. — 9-12

- that special type (italics, boldface) is a tool used by authors to aid the reader to perceive intended meaning.

- literal details are stated facts such as names of characters, setting, incidents and time a story took place.

- that sequence is the order of incidents and actions in a selection.

- the main idea of a selection is an explicit statement which conveys the theme or focus of the selection.

- signal words convey author's organization, direction, and point of view, e.g., first, second, next, although, however.

The student is able to:

- use clue words as an aid in determining sequence when reading.

- use special type (italic, boldface, capitals) as an aid to getting the meaning of a written selection.

- recognize, recall and/or locate significant details (when explicitly stated) from a selection read.

- recognize, recall and identify main ideas (when explicitly stated) from a selection read.

- recognize, recall and locate sequence (when explicitly stated) from a selection read.

- recognize, recall and locate character traits (when explicitly stated) from a selection read.

- recognize, recall and locate cause and effect (when explicitly stated) from a selection read.

- recognize, recall and locate comparisons (when explicitly stated) from a selection read.

- use signal words as an aid to identifying the author's organization.

The student values:

- the ability to recognize author's pattern and organization of material.

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SMALL SCHOOLS PROJECT

SUBJECT: READING

SPECIFIC AREA: COMPREHENSION

                   Interpretive

	Page	Suggested Grade Placement		District Placement	
		8	9		12

The student knows:

- ideas, events, or actions may be implied rather than stated directly in a selection.   9-12

- inferred details are those details which the author did not state directly, but which logically could have been included.

- the main ideas, theme, or focus may not be stated in the selection.

- an analogy is a comparison of two things that are related in some way.

The student is able to:

- identify clues which support inferences.
- infer sequence in a selection.
- identify an unstated main idea.
- infer cause and effect relationships.
- draw conclusions and substantiate them with reference to the material read.
- draw conclusions and generalize to new situations.
- predict the outcome of a selection.
- recognize relationships between analogous pairs.
- infer meanings from figurative language.
- understand the role of details in supporting a main idea.
- identify the clues upon which inferences are based.
- make valid inferences about the author's attitude toward the subject of a selection or toward the audience.
- extend his/her interpretation through visual imagery.
- relate previous learnings to new learnings.

The student values:

- the vicarious experiences which reading can provide.

- visual imagery as an aid to furthering one's appreciation and understanding.

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement			District Placement	

SUBJECT: READING

SPECIFIC AREA: COMPREHENSION

Interpretive: Elements of Literature		8	9	10	11	12	

The student knows:

- the elements of a story include plot, character and setting.   9-12
- the plot of a story presents a problem or conflict that is usually resolved.
- the sequence of incidents of a plot may be interrupted by flashbacks, subplots, prologues, parallel episodes and similar devices.
- introduction establishes mood and setting.
- character creation gives realism to characters and establishes character motivation.
- most literature is written from the point of view of first person (I), or third person (he, she, they).
- theme is the author's central thought in a selection which may involve several ideas.
- that the setting consists of time and place.
- mood refers to the atmosphere of the selection and is described in terms of human emotions and words with other elements to give shape to a whole pattern.

The student is able to:

- determine motivation of characters by drawing inferences from the various ways in which an author may reveal character, e.g., by what character says, by what the author tells the reader, by how others interact with the character.
- state the conflict or problem in a story or play.
- explain how the problem (conflict) in a short story or play is resolved.
- identify specific words or phrases which suggest a mood.
- identify the point of view in a story, i.e., first person narrator, third person omniscient author.
- identify any obvious symbolism.
- identify the setting and general atmosphere or mood produced by the setting.

The student values:

- literature as a source of insight into oneself as well as a means of identifying with the problems and emotions of others.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: READING

SPECIFIC AREA: COMPREHENSION

Evaluative

| | | | 8 | 9 | 10 | 11 | 12 |

The student knows:

. not all material written as fact is true.
. bias exists in written material.
. sensationalism is used to get attention.   9-12
. criteria used for determining usefulness of reading
  materials depends on the purpose for which the material
  is being used (subjective vs. objective accounts of an
  event, copyright date, credentials of author and
  publisher).

The student is able to:

. determine whether a selection or incidents in a selection
  are real or fictitious.
. evaluate a selection in terms of the author's credentials
  and copyright information.
. determine whether a selection or incidents in a selection
  represent fact or opinion.
. identify obviously stereotyped characters, events or
  situations in a selection.
. make evaluations of advertising.
. recognize propaganda techniques.
. recognize bias and prejudice within a selection.
. evaluate material as to relevancy of details as they
  pertain to a question to be answered.
. make judgments of worth, desirability or acceptability
  of a selection.
. determine whether evidence presented to support an opinion
  is objective, authoritative, and/or true to original
  context.
. evaluate materials using a set of criteria consistent with
  the purpose(s) for reading.

The student values:

. the worth of reading selections to him/herself as an
  individual.
. events in literature in the context of the time period in
  which they were written while examining them from a
  current time frame.
. author's ability to choose words, phrases, and style to
  create desired effects.
. the author's ability to elicit emotional response through
  choice of language and style.
. reading content which may serve as a model for standards
  of behavior.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement	District Placement				

SUBJECT: READING

SPECIFIC AREA: COMPREHENSION

					8	9	10	11	12
Appreciative									

The student knows:

. reading is a source of enjoyment. 9-12

. feelings and emo___ ___re affected by what is read.

. an individual's e___ ___nces influence his/her response to what is read.

. individuals may respond differently to a given selection.

. visual images (stemming from reading) may vary from person to person.

The student is able to:

. identify with characters and incidents.

. react to emotion or mood of a selection.

The student values:

. reading for pleasure and information.

. reading own work and work of peers.

. reading a selection and relating it to own personal experiences.

. author's creative, unique use of language.

. the opportunity to create his/her own visual images from reading.

. emotion or mood as an important element of a selection.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	READING						
SPECIFIC AREA:	ORAL READING, SILENT READING, RATE						
			8	9	10	11	12

The student knows:

- the purpose of oral reading is to share a written selection with an audience. — 9-12
- the style of presentation is a form of oral interpretation which may affect the listener.
- silent reading precedes oral reading when possible.
- oral reading slows the rate of reading.
- materials may be reread for various purposes, e.g., clarification, self-correction, locating specific information, appreciation of language and style.
- silent reading is more effective and efficient for gaining the author's intended meaning.
- several factors influence choice of rates, e.g., number and complexity of ideas of page, type of material, and purpose of reading.

The student is able to:

Oral Reading
- read orally with fluency and expression to give meaning to a reading selection.
- read orally to prove a point or provide information.
- enunciate clearly and project the voice to be heard.

Silent Reading
- read silently and respond to literal, interpretive and critical questions.
- determine the tone of the passage when reading silently.
- survey and adjust rate according to reader's purpose and complexity of materials.
- increase rate of reading and input of information.

The student values:

- reading and will choose to read silently.
- reading and will choose to read orally for others.
- reading a wide variety of printed materials
- sharing reading experiences with others.
- the ability to increase and adjust silent reading rate to accommodate various purposes.

	Page	Suggested Grade Placement	District Placement				

SUBJECT: READING

SPECIFIC AREA: REFERENCE SKILLS

	Page	Suggested Grade Placement		District Placement			
Alphabetizing and Dictionary			8	9	10	11	12

The student knows:

- most systems of ordering are based upon alphabetical sequence.   9-12
- each title is alphabetized by its first major word omitting articles (a, an, the).
- each name in a list is alphabetized by last name first.
- guide words are listed at the top of the page and aid in locating words.
- the symbols in the pronunciation guide are used to determine pronunciation.
- many words have multiple meanings based on contextual usage or part of speech.
- not all forms of words in dictionaries have separate entries.
- dictionaries vary in completeness and information, e.g., abridged, unabridged, appendices and additional helps.
- the dictionary is a source which offers more than word definition, e.g. etymologies, important dates, maps, biographies, foreign terms, measurement, scientific mathematical terms.

The student is able to:

- select dictionary appropriate to the purpose.
- use the dictionary key to understand how the dictionary is used.
- use the division of the dictionary to determine in which half or third word may be found.
- locate words in a dictionary alphabetically by second letter, third letter, fourth letter, etc.
- use guide words to locate words on a page.
- use pronunciation key as an aid to pronouncing words.
- use the dictionary to locate syllables in a word.
- use the dictionary to locate the accented syllable in a word.
- use the dictionary to determine part of speech of words based on contextual usage.
- use the dictionary to analyze the structure of words and locate etymologies.
- select word definitions to fit the context and make appropriate applications.
- locate words in their variant forms (tense, number).

The student values:

- the importance of an alphabetical ordering system as an aid to information storage and retrieval.
- the dictionary as a source of information (pronunciations, definitions, usage, spelling, etymologies, etc.).

SMALL SCHOOLS PROJECT

SUBJECT: READING

SPECIFIC AREA: REFERENCE SKILLS

Locating / Reference / Library

The student knows:

. books in the library are shelved in groups according to type, e.g., fiction, biography, reference, factual information.   9-12

. specific books and other materials or groups of books can be located through the card catalog and other visual guides, e.g., shelf labels, wall signs, diagrams.

. the card catalog is arranged in alphabetical order and cross referenced by subjects, authors or titles.

. nonfiction books are divided into ten subject groups (Dewey Decimal System).

. the Reader's Guide and Subject Index to Children's Magazines index magazine articles alphabetically.

. there are specialized references for locating information:
    encyclopedias list information alphabetically on a
      wide range of subjects.
    atlases are a bound collection of maps, tables, charts.
    almanacs are annual publications which include
      calendars, tables and/or other useful information.

. periodicals and newspapers are sources of current information.

. vertical files contain pamphlets, clippings, pictures and charts.

The student is able to:

. use card catalog to locate specific information, e.g., author, title, call number, number of pages, annotation.

. locate basic information in magazine index entry, e.g., title of article, title of magazine, pages, date of publication.

. use appropriate procedures to locate information in reference materials.

. use the vertical file to locate needed information.

The student values:

. the library as an invaluable source of information and pleasure.

-790-

READING IN THE CONTENT AREAS

SCOPE
9 - 12

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement	District P;

SUBJECT: READING IN THE CONTENT AREAS

SPECIFIC AREA: VOCABULARY DEVELOPMENT

General/Technical

			8	9	10	11	12

The student knows:

. many words in our language have been derived from names   9-12
  or borrowed from different languages.

.. that an extensive knowledge of word meanings aids in
  precise communication.

.. common words have different meanings in specific subject
  areas: current--science, current--social studies;
  change--science, change--economics/social studies,
  hobby or profession.

. each content area has a specialized vocabulary.

. that homographs are words that are spelled the same but
  have different derivations and meanings, and may differ
  in pronunciation, e.g., fair (market)/fair (just):
  object (noun)/object (verb).

. an acronym is a word formed by initial letters of words
  in a set phrase.

. the dictionary and thesaurus are resources for building
  vocabulary meaning.

The student is able to:

√ expand general vocabulary through involvement in reading.

. use the specialized vocabulary unique to each content
  area to increase comprehension.

. determine pronunciation and meaning of homographs.

. recognize and interpret acronyms and abbreviations.

.. use the dictionary for appropriate definitions and usage.

. use the thesaurus to locate synonyms, antonyms and
  specialized vocabulary.

The student values:

.. and appreciates the power of words.

. an expanding meaning vocabulary as an aid to understanding
  and communication.

SMALL SCHOOLS PROJECT

SUBJECT.:   READING IN THE CONTENT AREAS

SPECIFIC AREA: VOCABULARY DEVELOPMENT

Using Contextual Analysis

	Page	Suggested Grade Placement					
				8	9	10	11	12

The student knows:

that contextual analysis is the primary approach to word
recognition and vocabulary development through oral
and written language. — **9-12**

that contextual analysis involves the student's personal
knowledge of language as it relates to the way the
language is used by the writer.

that there are many different types of contextual
analysis clues depending upon the (word recognition)
situation, i.e.,

- Direct Explanation Clue - An outright explanation of
  the meaning of a word given to the reader.
- Experience Clue - Indirect experience through reading
  and other learning.
- Mood or Tone Clue - Meaning of a word harmonizes with
  author's tone.
- Explanation Through Example - An example that
  illustrates the meaning.
- Summary Clue - Reason out meaning by circumstances
  summing it up.
- Synonym or Restatement Clue - Meaning inferred from
  repeated idea nearby.
- Comparison or Contrast Clue - Meaning derived from
  word or idea already known.
- Familiar Expression or Language Experience Clue -
  Use familiar common language patterns to infer
  meaning.
- Words In A Series Clue - Meaning derived from a
  composite of all previous clues except explanation.
- Inference Clue - Meaning derived from a composite
  of all previous clues except explanation.

The student is able to:

use the context for the purpose of getting the meaning
of an unknown word or assigning the appropriate meaning
to a word having multiple meanings.

use different types of context clues (e.g. direct
explanation clue, experience clue, summary clue) as
an aid to getting meaning.

use context together with structural analysis to identify
known words or obtain the meaning of unknown words.

The student values:

the use of context and structural analysis as tools for
expanding ones vocabulary.

		Page	Suggested Grade Placement		District Placement		

SUBJECT: READING IN THE CONTENT AREAS

SPECIFIC AREA: COMPREHENSION

	Page	8	9	10	11	12
Literal						

The student knows:

. that special type and punctuation are tools used by
authors to aid the reader to perceive intended meaning. *(9-12)*

. literal details are stated facts used to support the
main ideas of a selection.

. that sequence is the order in which information is
presented in a selection.

. the main idea of a selection is an explicit statement
which conveys the focus or theme of the selection.

. signal words convey author's organization, direction,
and point of view, e.g., first, second, next, although,
however.

The student is able to:

. use special type (italics, boldface, capitals) as an aid
to getting the meaning of a written selection.

. recognize, recall and/or locate significant details
(when explicitly stated) from a selection read.

. recognize, recall and identify main ideas (when
explicitly stated) from a selection read.

. recognize, recall and locate sequence (when explicitly
stated) from a selection read.

. recognize, recall and locate character traits (when
explicitly stated) from a selection read.

. recognize, recall and locate cause and effect (when
explicitly stated) from a selection read.

. recognize, recall and locate comparisons (when explicitly
stated) from a selection read.

. use signal words as an aid to identifying the author's
organization.

The student values:

. the ability to recognize author's pattern and
organization of material.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: READING IN THE CONTENT AREAS

SPECIFIC AREA: COMPREHENSION

			8	9	10	11	12
Interpretive							

The student knows:

- ideas, events, or actions may be implied rather than stated directly in a selection. | | 9-12

- inferred details are those details which the author did not state directly, but which logically could have been included.'

- that the main ideas, theme, or focus may not be stated in the selection.

- an analogy is a comparison of two things that are related in some way.

The student is able to:

- understand the role of details in supporting a main idea.
- identify an unstated main idea.
- identify clues which support inferences.
- infer cause and effect relationships.
- draw conclusions and substantiate them with reference to the material read.
- recognize relationships between analogous pairs.
- infer meanings from figurative language.
- make valid inferences about the author's attitude toward the subject of a selection or toward the audience.
- relate previous learnings to new learnings.

The student values:

- the concepts and information gained from reading.

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	READING IN THE CONTENT AREA						
SPECIFIC AREA:	COMPREHENSION						
	Evaluative		8	9	10	11	12

The student knows:

- not all material written as fact is true.   9-12
- bias exists in written material.
- sensationalism is used to get attention.
- the criteria used for determining usefulness of reading
  materials depends on the purpose for which the material
  is being used (subjective vs. objective accounts of an
  event, copyright date, credentials of author and
  publisher).

The student is able to:

- evaluate a selection in terms of the author's credentials
  and copyright information.
- determine whether a selection or incidents in a selection
  represent fact or opinion.
- identify obviously stereotyped characters, events or
  situations in a selection.
- make evaluations of advertising.
- recognize propaganda techniques.
- recognizes how the author uses language to persuade or
  elicit emotional responses including projecting attitudes
  of bias and prejudice.
- evaluate material as to relevancy of details as they
  pertain to a question to be answered.
- make judgments of worth, desirability or acceptability of
  a selection.
- determine whether evidence presented to support an opinion
  is objective, authoritative, and/or true to original
  context.
- evaluate materials using a set of criteria consistent with
  the purpose(s) for reading.

The student values:

- the worth of content materials to him/herself as an
  individual.
- individual creative endeavors as contributions to the
  development of the sciences and humanities.
- author's ability to choose words, phrases, and style to
  create desired effects and convey information.
- the author's ability to elicit emotional response through
  choice of language and style.
- reading content which may serve as a model for standards
  of behavior.

	Page	Suggested Grade Placement			District Placement	

SUBJECT: _____ READING IN THE CONTENT AREAS

SPECIFIC AREA: _____ GENERAL STUDY TECHNIQUES

_____ Preparing for Study

	8	9	10	11	12

The student knows:

- that the preliminary steps to prepare for an assigned   9-12
  learning task include:
  determining the teacher's objectives for the lesson;
  relating -- the purpose for reading must be related
               to the objectives for the lesson;
  choosing -- an appropriate rate must be chosen for
               the task.

- the importance of taking personal responsibility for
  budgeting study time and finding a suitable environment
  for study.

- there are systematic study techniques which promote
  efficient, effective use of time.

The student is able to:

- ask questions to clarify the teacher's objectives for
  the lesson.

- set a purpose for reading.

- choose a rate appropriate to the task.

- set goals to use available study time to best advantage.

The student values:

- the importance of using study techniques.

- the importance of preparing for study.

- self-discipline and concentration.

- active participation in the reading study process.

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

SUBJECT: READING IN THE CONTENT AREAS

SPECIFIC AREA: GENERAL STUDY TECHNIQUES

                  Surveying

The student knows:

- the organization of the text is an aid to study: 9-12
  - table of   lists page numbers of chapters/sections
    contents: of a book.
  - glossary: lists names and word definitions.
  - index: used to locate specific information.
  - preface: states author's purpose.
  - bibliography: lists references used to support
                   author's point of view.

- the purpose for surveying is to obtain a mental outline of chapter headings, sub headings, summaries, questions, etc.

- that the meanings of general and specialized vocabulary terms are essential to understanding the content of a subject area.

- appropriate uses for skimming and scanning.

The student is able to:

- use signal words to identify author's organization.

- survey the organization of the text to obtain a mental outline of its parts as an aid to study, e.g., table of contents, preface, indices, glossary.

- use the steps in surveying to obtain a mental outline of the chapter: by reading title, major headings, subheadings, chapter summary, chapter questions, marginal notes, graphics, first sentence in paragraph.

- identify key words as an aid to finding main topic, subtopic, and cross-reference in the index.

- note unfamiliar vocabulary (specific to content as well as general) which may limit understanding of concepts.

- skim for general information and/or main ideas.

- scan for specific words, names, dates.

- use the survey or preview portion of the study formulas (SQ3R, PQ4R, or variations related to particular content areas: SQRQCQ, PQRST).

The student values:
- that understanding book format can make books work for them.
- the importance of examining the overall structure of the chapter or unit before detailed reading occurs.
- the use of a study formula as an aid to learning.
- the organization and format of a book as an aid to study.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: READING IN THE CONTENT AREAS

SPECIFIC AREA: GENERAL STUDY TECHNIQUES

	Page	Suggested Grade Placement		District Placement		
Questioning		8	9	10	11	12

The student knows:

- questioning is the second step in using a study formula.   9-12

- there are questions at different levels of complexity which require different types of responses (see appendix):

- mentally asking questions of the content before reading assists in setting purposes.

- asking questions before reading is active participation in the study process.

- drawing questions from personal experiences will make content more meaningful and useful.

The student is able to:

- respond appropriately to different types and levels of questions.

- turn titles / headings into questions appropriate to purpose.

- ask questions of the content appropriate to the purpose as an aid to reading and understanding, e.g., What do I already know about the topic? What do I expect to learn?

- draw upon personal experiences to formulate content related questions.

- write corresponding questions of the content before reading assists in setting purposes.

> Surveying and questioning as part of study formula occur simultaneously.

The student values:

- questioning as an aid to learning and clarifying concepts.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement	District Placement			

SUBJECT: READING IN THE CONTENT AREAS

SPECIFIC AREA: GENERAL STUDY TECHNIQUES

	Page		8	9	10	11	12
Study Reading							

The student knows:

	Page						
• the meaning of technical terminology unique to the content area.	9-12						
• the difference between study reading and narrative reading.							
• that the study unit concept involves mastery of content in intermittent readings based on student's individual capabilities.							

The student is able to:

• use word recognition techniques to perceive the meaning of unfamiliar vocabulary.

• adjust rate of reading related to purpose and type of material.

• mentally answer questions formulated prior to reading.

• determine the main ideas of the selection.

• relate supporting details to general topic headings and/or overview of main ideas of selection.

The student values:

• the importance of learning technical and general vocabulary related to content.

• study reading as different from narrative reading.

SMALL SCHOOLS·PROJECT

						Page	Suggested Grade Placement		District Placement		

SUBJECT: READING IN THE CONTENT AREAS

SPECIFIC AREA: GENERAL STUDY TECHNIQUES

	Page	8	9	10	11	12
Retention		8	9	10	11	12

The student knows:

. the following specific study techniques and retention: 9-12
    studying at regular times·
    spacing study and review over time
    mentally reciting information
    paraphrasing

. certain ways of organizing material appropriate to purpose:
    taking notes, making an outline, writing a summary,
    drawing graphs, building models, sketching a picture.

. which personal study techniques are most effective for
  him/her.

. application of new information develops concept and aids
  retention.

. retention of information is aided by study reading which
  divides material into segments to be read and assimilated.

The student is able to:

. use some or all of these written aids to retention:
    taking notes, outlining, organizing information,
    developing study guides, developing visuals (graphs,
    pictures, charts).

. use recitation skills as aids to retention:
    summarizing, paraphrasing, forming analogies.

. review and reread material to retain information and
  promote concept development.

. develop memorization skills as aids to retention, e.g.,
  using mnemonic devices, massing practice, intermittent
  practice, overlearning, reordering lists.

. draw relationships and form generalizations from
  accumulated information.

The student values:

. the ability to apply information to real-life situations.

. the retention of knowledge and skills as foundations of
  lifetime understandings.

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SMALL SCHOOLS PROJECT

			Page	Suggested Grade Placement		District Placement		
SUBJECT:	READING IN THE CONTENT AREAS							
SPECIFIC AREA:	GENERAL STUDY TECHNIQUES							
	Test Taking				8	9	10	11	12

	Page	8	9	10	11	12
The student knows:						
the reason for testing is to evaluate what the learner has learned and what the teacher has taught.	9-12				/	
vocabulary terms unique to tests.				°		
the purpose, type of test, and method of scoring (penalties for guessing, weighting, etc.), prior to studying for the test.			\			
preparation techniques will vary depending on the type of test to be given: . Essay tests -- broad topics . Objective tests -- specific information . Open Book tests -- familiarity with text-specifics						
that types of test questions include: <u>Objective tests</u> true/false, multiple choice, completion, matching <u>Subjective tests</u> essay, short answer						
certain types of answers are required for certain types of questions.						
The student is able to:						
anticipate types of test questions.						
review and use various study techniques when preparing for a test.						
follow directions related to format, scoring, type of response, procedures in answering test items.						
proofread test responses.						
pace the test so there is sufficient time to respond adequately.						
use signal words and test vocabulary as aids to giving appropriate answers.						
formulate an outline as an aid to taking an essay exam or subjective test.						
The student values:						
the knowledge and techniques of test taking. being mentally and physically prepared for a test. evaluation procedures as an important part of the learning process.						

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LANGUAGE ARTS PROGRAM GOALS
(K-12)

1. The student uses language effectively in interaction with others, gaining and improving speaking and listening skills in group communication process.

2. The student writes openly, clearly and creatively.

3. The student acquires, interprets and evaluates information through purposeful and critical observation and listening.

4. The student responds in subjective, analytic and evaluative ways to literature and the humanities as a reflection of the life, values and ideas of this and other cultures.

5. The student comprehends the printed material needed to succeed in educational, vocational and social interests and inquiries.

6. The student recognizes that ideas are expressed in many ways: in varieties of dialects, of verbal modes, of styles and usage levels, of associations and points of view.

7. The student adapts speech and writing to different purposes, audiences and communication forms and uses the mechanics and conventions of writing and speech appropriately to assure accuracy and clarity in communication.

8. The student expresses and interprets ideas, attitudes and feelings effectively in verbal and nonverbal ways.

9. The student knows that language adapts to the needs of people through time.

10. The student knows that one's experience in the world is given meaning and shape by language.

LANGUAGE ARTS

SCOPE

9 - 12

VI. LITERATURE

SMALL SCHOOLS PROJECT

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: GRAMMAR

	Page	Suggested Grade Placement		District Placement		
Parts of Speech		8	9	10	11	12

The student knows:

At the secondary level it is assumed that, although the student needs to know these objectives, emphasis will be on application.

- a noun names persons, places, things, or ideas.   (9-12)
- a pronoun is used in the place of a noun.
- verbs are words used to express action, to show state of being, to link the complement with the subject, and to help other verbs.
- verb phrases consist of a main and helping verbs.
- adjectives are words that describe nouns or pronouns.
- adverbs are words that describe adverbs, adjectives and verbs.
- prepositions are words which show relationships between their objects and other words in the sentence.
- prepositional phrases are used as adjectives or adverbs.
- conjunctions are words that join words, phrases, and clauses.
- interjections are words that express strong feeling.
- verbals are formed from verbs and used as various parts of speech.

The student is able to:

- identify nouns by their singular and plural forms.
- distinguish the various kinds of nouns.
- identify pronouns.
- distinguish the various kinds of pronouns.
- identify prepositional phrases.
- identify verbs and verb phrases.
- distinguish the various forms of verbs.
- identify adjectives.
- distinguish the various kinds of adjectives.
- identify adjectives by position and by variant form.
- identify adverbs.
- distinguish the various kinds of adverbs.
- identify adverbs by position and meaning.
- identify prepositional phrases as either adjective or adverbal.
- identify verbals, e.g., participles, gerunds, infinitives.
- identify conjunctions.
- distinguish the types of conjunctions.
- identify interjections.

The student values:

- the use of grammar as a tool in understanding the English language.

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	LANGUAGE ARTS						
SPECIFIC AREA:	GRAMMAR						
	Sentences		8	9	10	11	12

The student knows:

· · that a sentence is a complete thought.
· the various kinds of sentences according to purpose.
· the four types of sentences according to the structure.
· that word order is essential to meaning and that sentences can be classified by word patterns.

    Examples of sentence patterns:

· The <u>fire burns</u>. (subject, verb)

· The <u>dog bit</u> the <u>man</u>. (subject, verb, object)

· My <u>dog is</u> a <u>collie</u>. (subject, verb, subjective complement)

· The <u>air is cold</u>. (subject, verb, adjective complement)

· <u>Bill gave</u> the <u>dog</u> a <u>bone</u>. (subject, verb, indirect object; direct object)

· The <u>class elected Bob president</u>. (subject, verb, object, objective complement)

The Page/Grade cell shows: 9-12

The student is able to:

- · identify a complete sentence.

· identify types of a sentence structure; e.g., simple, compound, complex, compound/complex.

· identify various kinds of sentences, e.g., interrogative, declarative, exclamatory, imperative.

· identify various sentence patterns (see above).

The student values:

· knowledge of sentence patterns in varying sentences.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement	District Placement			
SUBJECT: LANGUAGE ARTS							
SPECIFIC AREA: GRAMMAR							
Phrases and Clauses				8	9	10	11	12

The student knows:

. a phrase, a group of related words without a subject or predicate, is a single part of speech.   9-12

. a clause is a group of words containing a subject and a predicate.

: an elliptical clause omits a word or words necessary for grammatical construction, but not for meaning.

The student is able to:

. identify the following types of phrases: prepositional, appositive, participial, gerund, infinitive.

. identify use of the phrases within the sentence context.

. identify types of clauses: noun, adjective, and adverbial.

. identify restrictive or non-restrictive adjective clauses and phrases.

. identify elliptical clauses and distinguish them from phrases.

The student values:

. the ability to vary sentence structure by rearrangement of phrases and clauses.

SMALL SCHOOLS PROJECT

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: LANGUAGE

	Page	Suggested Grade Placement	District Placement				
Usage			8	9	10	11	12

The student knows:

. that formal standard English is the everyday language of educated speakers exercising precision in serious speaking or writing.   [9-12]

. that informal standard English is the everyday language of educated people.

. that substandard English is generally inappropriate.

The student is able to:

. use pronouns correctly:
   as a subject
   as an object
   as a predicate nominative
   as an appositive
   with subject agreement
   in reflexive situations

. use adjectives correctly:
   in comparisons
   as predicate adjectives

. use adverbs correctly:
   in comparisons
   as modifiers
   appropriate use of negatives.

. use verbs correctly
   in agreement with the subject
   in proper tense form

. use prepositions correctly -
   always use at the beginning of the phrase

. use conjunctions in proper parallel construction.

The student values:

. the ability to use both formal and informal English in appropriate settings.

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SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement	District Placement				
			8	9	10	11	12

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: LANGUAGE

                           Lexicography

The student knows:

. that a dictionary records usage -- the words people   9-12
  actually use in characteristic situations.

. dictionaries tend to have a conservative effect upon
  language change.

  the origin of a word can be identified by its symbol
  in the dictionary.

. specialized dictionaries include word usages in addition
  to word meaning.

The student is able to:

. use the dictionary as a reference.

The student values:

. that a dictionary is a record of words in use at a given
  time.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		

SUBJECT: _____LANGUAGE ARTS_____

SPECIFIC AREA: __LANGUAGE__

			8	9	10	11	12
History of English							

The student knows:

- that most European languages were derived from the Indo-European language and that these languages constitute a family of languages. — 10-12

- that because there are no surviving records of the Indo-European language, it has been reconstructed by the comparison of word forms and etymologies from various European languages.

- that English is a member of the Germanic branch of the Indo-European family.

- that the following events (outer history) affected the structure of the English language (inner history): (1) Germanic tribes settled Great Britain; (2) Danish settlement; (3) medieval church; (4) Norman settlement; (5) Chaucer's literature; (6) invention of the printing press; (7) the Renaissance; (8) expansion of the British Empire.

- that many words were borrowed from other languages, particularly Greek, Latin and French.

- that the language of our nation is greatly influenced by time, mobility, mass communication and technology.

The student is able to:

- recognize certain words by their spelling, punctuation, and/or meaning as being derived from a certain country or geographical location.

The student values:

- the diversity of the history of language.

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SMALL SCHOOLS PROJECT

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: LANGUAGE

Nature of Language

	Page	Suggested Grade Placement	District Placement			
			8	9	10	11	12

The student knows:

- that language changes in its usage, pronunciation and vocabulary. | 10-12

- meanings of words change more rapidly than pronunciation and usage.

- interacting speech communities influence language change, e.g., black, Hispanic, southern, regional.

- words are often borrowed from other languages to fill a need in a native language (e.g., Yule).

- words are sometimes borrowed from other languages merely for prestige value.

- scientific words often retain Latin or Greek origins to insure clarity.

- compounding (e.g., buttercup from butter and cup) is a major method of creating new words.

- compounding creates a new semantic unit: something different from the sum of the meanings of two words.

- political, economic and military events and trends influence the history of languages.

- that vocabulary changes -- new words are added and old ones dropped in response to human needs in a culture.

- coined expressions evolved through folklore, mores, Bible, history.

- each child learns an individual language because of the influence of parents and peers.

The student values:

- an expanded vocabulary for precise expression and better communication.

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SMALL SCHOOLS PROJECT.

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	LANGUAGE ARTS						
SPECIFIC AREA:	MECHANICS						
	Capitalization (Skills Review)		8	9	10	11	12

The student knows:

. See K-8 objectives for using capital letters.   9-12

The student is able to:

. use capital letters when writing:

. the first word in a line of traditional poetry, e.g.,

Our fears in Banquo
Stick deep: and in his royalty of nature
Reigns that which would be feared.
Shakespeare

. the first word in a sentence of direct quotations, e.g.,

She asked, "May I assist you?"

. proper adjectives, e.g., Roman customs, Belgian hare.

. proper nouns.

. the first word of a sentence.

. titles.

The student values:

. proper usage of written conventions for communication.

. the necessity of punctuation for clarity in communication.

SMALL SCHOOLS PROJECT

SUBJECT:　　　LANGUAGE ARTS

SPECIFIC AREA: MECHANICS

Punctuation

	Page	Suggested Grade Placement	District Placement				
			8	9	10	11	12

The student knows:

See K-8 objectives for punctuation.　　Page: 9-12

The student is able to:

- use commas to punctuate:
  - words, phrases and clauses in a series.
  - addresses, dates and letters.
  - introductory elements.
  - coordinating conjunctions in a compound sentence.
  - interrupting elements: parenthetical expressions, nonrestrictive phrases and clauses, appositives.
  - direct quotations.

- use apostrophes to punctuate:
  - plurals of symbols.
  - contractions.
  - possessives (both singular and plural).

- use single and double quotation marks to punctuate:
  - titles of short stories, articles, songs, poems.
  - excerpts quoted directly from resources.
  - dialogue.

- use end marks appropriately.

- use hyphens to punctuate:
  - compound numbers.
  - words divided at the end of a line.
  - compound words, e.g., brother-in-law.

- use semi-colons between parts of a compound sentence and in a series.

- use colons before a list, in a business letter, in time notation, before a long, formal quotation, Bible reference.

- use underlining for titles, for emphasis.

- use the dash in a break of thought.

- use parenthesis to enclose words which are added to a sentence but are not considered of major importance.

- brackets to enclose parenthesis within parenthesis.

- write words in which the singular possessive is formed by adding 's.

- write words in which the plural possessive is formed by adding 's, and words in which the plural possessive is s'.

- write possessives showing joint ownership.

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SMALL SCHOOLS PROJECT

SUBJECT: _____ LANGUAGE ARTS

SPECIFIC AREA: _____ SPELLING

	Page	Suggested Grade Placement	District Placement				
			8	9	10	11	12

The student knows:

. correct spelling aids communication.   `9-12`

. an individual card file of frequently used words in a handy reference.

. that short practice periods on spelling in the beginning followed by intermittent practice periods will aid retention.

. that dictionaries are the most comprehensive and authoritative source for correct spelling.

The student is able to:

. proofread his/her own writing for spelling errors.

. use dictionaries to help spell words correctly.

The student values:

. spelling words correctly in written work.

SMALL SCHOOLS PROJECT

SUBJECT: ___LANGUAGE ARTS___

SPECIFIC AREA: ___WRITTEN EXPRESSION___

Planning/Preparation: Purpose/Audience

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

The student knows:

- writing can be a means of discovery of personal feelings, beliefs, and values. | 9-12

- the choice of subject is basic to the value of the finished composition for the audience and the writer.

- that differing purposes shape the content and language of a composition.

- all parts of a composition should contribute to the achievement of its purpose.

- different demands on writing are created by the characteristics of different audiences (age, interest, points of view, attitude).

The student is able to:

- observe experiences and objects accurately and note details

- recognize ideas, experiences and topics that would be of interest and value to others.

- narrow general subjects to workable topics or themes.

- use memory to recall accurate details.

- turn experiences and ideas into effective language.

- use imagination to create interesting details.

- choose appropriate point of view (1st or 3rd person).

- analyze an audience to determine the most effective content and language with which to achieve his/her purpose.

- write effectively for a variety of audiences by varying language and content.

The student values:

- sharing ideas and experiences through writing.

- writing which is clearly focused on a dominant purpose.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	LANGUAGE ARTS						
SPECIFIC AREA:	WRITTEN EXPRESSION						
	Planning/Preparation: Structure/Style		8	9	10	11	12

The student knows:

> .. that structure is the organizational plan of a total work.   9-12

> . the uses of general structural patterns,
> . e.g., generalization—support; comparison—contrast;
> inductive—deductive.

> . style is based on individuality of word choices, sentence
> patterns, and point of view.

The student is able to:

> . organize work in a logical sequence.

> . use structural patterns effectively.

> . create effective opening statements.

> . create effective conclusions.

> . write smooth transitions.

> . provide relevant details.

> . choose the most effective words to suit a variety of
> purposes and audiences.

> . write using a variety of sentence patterns.

The student values:

> . the need for an organizational structure in writing to
> aid the reader in clearly following the content.

> .. the contribution of individual style to the writing
> and reading experience.

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: WRITTEN EXPRESSION

			8	9	10	11	12
Writing/Revising: Outlining/Notetaking/Drafting							

The student knows:

	Page
notetaking is an important tool used to record the major ideas from a speech, written word or piece of research.	9-12

· ways that a speaker or writer signals important ideas and examples.

· an outline is an aid to organizing and presenting a topic.

· a draft is not a finished paper.

The student is able to:

· take detailed notes on a given topic which accurately represent the content.

· recognize pertinent information and omit non-pertinent details.

· take notes from reading and lectures using mnemonic devices appropriate to the content and purpose.

· use direct quotations, paraphrasing and summary in taking notes.

· write a topic or sentence outline to be used in the development of a paper.

The student values:

· the need to take notes and outline.

· the drafting process as an aid to developing effective writing.

· the drafting process as a means of exploring ideas and feelings.

SMALL SCHOOLS PROJECT /

SUBJECT: _____ LANGUAGE ARTS

SPECIFIC AREA: WRITTEN EXPRESSION

Writing / Revising: Editing / Proofreading

	Page	Suggested Grade Placement			District Placement	
		8	9	10	11	12

The student knows:

. most writing can be improved through effective editing.   9-12

. one writes to communicate with others.

. correct usage (punctuation, capitalization, spelling)
exists to enable others to read accurately what the writer
intended.

. proofreading is a necessary step in producing a "finished"
product which is free of errors in usage and mechanics.

The student is able to:

. look objectively at personal writing.

.. examine sentence structure, identify weaknesses, and
revise sentences into more effective patterns.

. revise the order and structure of paragraphs in order
to improve a composition.

. identify the balance of content in the paper.

: examine the opening and concluding statements, examine
paragraph transitions, identify and revise weaknesses.

. recognize and correct errors in usage, mechanical errors
and misspelled words.

The student values:

. writing enough to care to improve it.

. editing as a means of improving writing.

. writing which is free of errors.

. correct usage, spelling, punctuation and capitalization
in writing.

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SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: WRITTEN EXPRESSION

Levels / Types: Sentences / Paragraphs			8	9	10	11	12

The student knows:

- word positions in a sentence may be shifted in order to provide emphasis or variety.   9-12

- a paragraph is a series of sentences developing one topic.

- the topic sentence states the single idea of the paragraph.

- every sentence in the paragraph should be related to the topic.

- that sentences should be arranged in a clear, logical point by point order.

- a paragraph should include enough sentences to develop the topic well.

- transitional expressions can help smooth the flow of words and sentences.

The student is able to:

- write the four types of sentences: interrogative, declarative, imperative, exclamatory.

- write an answer to a question with a clear and complete sentence.

- write sentences using coordination and subordination.

- change the position of words in a sentence in order to provide emphasis and variety.

- develop a paragraph by giving details or examples, telling a story, relating an incident, giving reasons, or making comparisons or contrasts.

- develop a paragraph by arranging details in a logical order, e.g., chronologically, spatially, or in order of importance.

The student values:

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		
SUBJECT: LANGUAGE ARTS						
SPECIFIC AREA: WRITTEN EXPRESSION						
Levels / Types: Expository Writing		8	9	10	11	12

The student knows:

. the formal conventions used in essay and research writing.   9-12

. the essay can be either personal, informal, or formal.

. the qualities of each type of essay: narrative, descriptive, persuasive.

. that every composition has an introduction, a body and a conclusion.

. that a narration is a form of writing that tells a story.

. that description is a form of writing that appeals to the senses.

. that persuasion is a form of writing that attempts to change or instill a belief.

The student is able to:

. limit the subject and adapt the subject to the audience.

. determine the purpose of the composition.

. take effective notes as a background to writing.

. plan the composition before writing it.

. use common structural patterns in essay writing, e.g., generalization--support; inductive--deductive; comparison--contrast.

. write a narrative or description with a clear sequence of ideas and include interesting and necessary details.

. use quoted material correctly and effectively.

The student values:

. writing as a means of conveying ideas and information to others.

. accurate and interesting expository writing.

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SMALL SCHOOLS PROJECT

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: WRITTEN EXPRESSION

Levels / Types: Research Writing

	Page	Suggested Grade Placement		District Placement		
		8	9	10	11	12

The student knows:

there are formal conventions and criteria for writing a research paper. — Page 9-12

how to write a research paper which includes: (1) title page, (2) introductory statement that explains and limits the topic, (3) relevant facts on the topic, (4) logical presentation, (5) conclusions drawn as a result of research, (6) documentation with footnotes, (7) complete bibliography.

The student is able to:

choose and limit the subject.

locate and use source materials. (See Reading In The Content Areas)

develop and revise a preliminary outline.

use a separate card for each topic and each source.

write the rough draft.

write a final draft including:
    introduction
    body
    conclusion
    footnotes
    bibliography

acknowledge quoted or borrowed ideas with the proper use of quotation marks, reference to authorities, or a bibliographical list of references used.

The student values:

the need for integrity in research.

careful, thorough research.

SMALL SCHOOLS PROJECT

			Page	Suggested Grade Placement		District Placement				
SUBJECT:	LANGUAGE ARTS									
SPECIFIC AREA:	WRITTEN EXPRESSION									
	Levels / Types: Creative Writing				8	9	10	11	12

The student knows:

    the elements of script writing.   9-12

    the elements of short story writing: plot, setting, character, theme, tone, mood.

    the elements of poetry writing.

        (See Literature section.)

The student is able to:

    describe a character, using physical characteristics, actions, thoughts, attitudes, and dialogue.

    write using an imaginative approach.

    write a vivid description of a setting.

    write in first or third person point of view.

The student values:

    creative writing as a way of expressing emotions and thoughts in an original manner.

SMALL SCHOOLS PROJECT

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: WRITTEN EXPRESSION

	Page	Suggested Grade Placement		District Placement		
Levels / Types: Journalistic Writing		8	9	10	11	12

The student knows:

• that journalistic writing utilizes a format designed to
  meet the specific interests of several audiences.   9-12

The student is able to:

• write a newspaper article which contains: (1) the five
  W's (when, what, where, why and who); (2) the inverted
  pyramid form (significant details at the beginning of the
  article); (3) no statements of personal opinion; (4) iden-
  tification of source(s); (5) paragraphs independent of the
  others in the article to allow cutting when necessary.

• write headlines which give the essential information in
  the space allotted.

• write a television or movie review, which includes basic
  information, explained opinion, and recommendations to
  the reader.

• write captions for photographs and illustrations which
  give appropriate information within the constraints of
  allotted space.

• write sports and news articles and human interest (feature)
  stories.

The student values:

• clear objective reporting of information.

SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: ___LANGUAGE ARTS___

SPECIFIC AREA: ___WRITTEN EXPRESSION___

Levels / Types: Business Letters and Forms

			8	9	10	11	12

The student knows:

.. the six parts of a business letter: heading, inside   9-12
address, salutation, body, closing, and signature.

/ the difference between a business and social letter (see
Small Schools 4-8, Letter Writing).

. that a social letter omits an inside address.

. that the business letter is usually written in block,
solid block, or semi-block form.

The student is able to:

. write a business letter containing a heading, inside
address, greeting, body, closing, and signature.

. address an envelope (see Small Schools 4-8, Letter Writing).

. write a resume.

. provide all the required information on application forms.

. fill in answers on simple test forms according to /
directions, such as driver's license test, or aptitude
test.

. write a letter of introduction and application.

. write or print neatly.

The student values:

. importance of writing letters as a form of communication.

. the need for neatness and accuracy when completing a form.

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SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: LISTENING

	Page	Suggested Grade Placement		District Placement		
			8	9	10	11	12

The student knows:

- that a positive attitude toward the speaker and the topic will make listening more productive. — Page: 9-12

- that listening for a purpose contributes to the value and efficiency of the process.

- good listening habits, e.g., focusing attention on speaker, not talking to others, refraining from interrupting the speaker, paraphrasing.

- the speaker's use of language affects listener response, e.g., establishes mood, triggers emotional reaction.

- the nature and importance of feedback.

- the listener has an ethical responsibility to: listen critically, determine validity of assertions, and question tactfully.

The student is able to:

- listen for a specific purpose, e.g., instructions, main idea, supporting details.

- focus attention on speaker and adapt level of attention to purpose for listening.

- evaluate oral presentations for clarity of purpose, organization, relevance of information to topic, authority and accuracy.

- select from a speech the particular information desired.

- recognize logical arrangements in speeches, e.g., cause and effect, problem/solution, main/supporting ideas, spatial relationships.

The student values:

- verbal communication with others as a means to refine, clarify and evaluate one's perceptions and values.

- the human ability to auditorily receive and evaluate information.

SMALL SCHOOLS PROJECT:

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: SPEAKING

	Page	Suggested Grade Placement		District Placement	
General Oral Communication		8	9	10	11	12

The student knows:

- communication depends upon speaking distinctly with adequate volume to be understood.

- the larger the audience, the more care must be given to articulation.

The student is able to:

- use gestures that are natural, appropriate, and selective.

- establish and maintain eye contact with the audience in order to gain attention and utilize feedback.

The student values:

- humor.

- responsible decision-making, i.e., decisions based on adequate, accurate and relevant information.

- consistency between one's values and one's behavior.

- conversation as a social gesture and an avenue to meaningful dialogue.

- discipline and concentration.

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SMALL SCHOOLS PROJECT

			Page	Suggested Grade Placement		District Placement			

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: SPEAKING

	Page	8	9	10	11	12
Discussion / Conversation						

The student knows:

- face-to-face communication involves interaction between speaker and listener, including eye contact, nonverbal expressions, and responses.   9-12

- the basic elements of courtesy desirable in person-to-person conversation, group conversation, and telephone conversation.

- ways to increase effectiveness in group communication:
  (1) be informed on topic, (2) act as a catalyst, (3) examine one's own motives, (4) be aware of group sensitivities, (5) utilize effective communication skills.

- discussions usually have one purpose: to exchange ideas, or to reach an agreement (consensus).

- the steps a group member should take to prepare for a discussion: (1) review personal knowledge, (2) bring information up to date, (3) determine a tentative point of view, (4) relate facts and ideas to the problem and people involved.

- the responsibilities of a discussion leader including:
  (1) to prepare an overall outline, (2) to begin with an opening statement, (3) to guide the meeting, (4) to encourage participation, (5) to moderate conflicts, (6) to develop consensus.

The student is able to:

- frame topics conversationally.

- react to thoughts that others express by clarifying, qualifying, extending the idea, or drawing a conclusion.

- "stick to the point," keeping remarks relevant.

- summarize the main points of the discussion and the resulting decisions.

- initiate group activity for specific purposes, e.g., sharing ideas, producing a report, structuring inquiry.

- use ideas, data and criticisms of others to further and improve own work.

- challenge assertions made by others in discussions.

- modify position when information warrants such change.

- participate in a meeting according to the rules of parliamentary procedure.

- assume a leadership role when appropriate.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement	District Placement		
SUBJECT:	LANGUAGE ARTS					
SPECIFIC AREA:	SPEAKING					
	Speech Making		8	9	10 11 12

The student knows:

- that personal interests and experiences are valid sources of speech topics. `9-12`

- that a speech topic should be important to both the speaker and the audience.

- that a speech must be organized so that the listeners can understand the major thesis and supporting facts.

- that supporting points clarify and support the central idea of a speech.

- that main points may have different arrangements such as: chronological, climactic, logical (problem-solution, cause-effect, sequential, or spatial).

- that a speech may be impromptu, extemporaneous, memorized, read from a manuscript or a combination of these.

The student is able to:

- formulate an outline for a speech.

- use notecards, eye contact and gestures appropriately.

- phrase the central idea of a speech in a thesis sentence.

- use supporting points to describe, clarify and support the central idea.

- adapt the formality of the speech (both in language and content) to the audience being addressed.

- classify and organize facts, ideas, or arguments in such a way as to facilitate audience understanding and retention.

The student values:

- organization and planning (including outlining and note cards) as aids to delivering an effective speech.

- a well-delivered speech.

- constructive criticism which is tactful, specific and significant as a valuable aid to improvement.

SMALL SCHOOLS PROJECT

SUBJECT: ____LANGUAGE ARTS_____

SPECIFIC AREA: __SPEAKING_____

	Page	Suggested Grade Placement	District Placement		
Oral Interpretation		8	9	10	11	12

The student knows:

- the steps in preparing a poem for oral reading: analysis
  of meaning, mood, meter and rhythm.   [9-12]

- steps in analyzing the thought of a prose selection:
  - reading for general meaning
    checking word meaning
    checking word grouping
    analyzing figures of speech

- listeners give the oral reader clues as to his or her.
  effectiveness, both auditory, (e.g., laughing, clapping,
  sighing) and visual, (e.g., movement, facial expression.)

The student is able to:

- select a passage from a story or novel that is appropriate
  for oral interpretation.

- establish a relationship with the audience, e.g., build
  interest, trust and an appropriate climate for the
  purpose.

The student values:

- effective oral interpretation of prose or poetry.

SMALL SCHOOLS PROJECT

SUBJECT: _____ LANGUAGE ARTS

SPECIFIC AREA: SPEAKING

	Page	Suggested Grade Placement		District Placement		
Dramatics		8	9	10	11	12

The student knows:

- ways in which believing in the "reality" of a dramatic role affects imagined thoughts, feelings, and actions, i.e., "Acting is believing." **9-12**

- personal experiences are valuable resources in creating believable roles.

- improvisation is the process of extemporizing physical actions including speech.

- the stage is divided into areas of emphasis, has levels of use and allows the placement of actors in relation to other actors for purposes of emphasis.

- lighting is used not only to illuminate actors, but is so placed and colored that it becomes an integral means of interpreting the dramatist's work.

The student is able to:

- engage in creative dramatics based on stories read or heard.

- improvise when given a minimum of direction and information.

- integrate voice and movement in interpreting character.

- plan scenes of a familiar story and take part in presenting them in a largely extempore dramatization.

- plan simple settings which are functional (facilitate movement) and visually effective (symbolizing or enhancing theme or mood.)

- plan and execute basic lighting designs, i.e., provide adequate light in a way which enhances meaning.

- analyze a character and create an effective make-up plan for the actor interpreting the role.

The student values:
- drama as a form of self-expression.

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SMALL SCHOOLS PROJECT

SUBJECT: LANGUAGE ARTS

SPECIFIC AREA: SPEAKING

		Page	Suggested Grade Placement	District Placement			
Debate				8	9	10	11	12

The student knows:

. debate propositions may be classified as propositions of   9-12
  fact, value or policy.

. the characteristics of a good proposition are:
    it has two sides
    it is free of ambiguous terms
    it is stated in the affirmative
    it proposes a course of action

. the "burden of proof" rests upon the affirmative.

. strategy is the constraint of logic and evidence in debate,
  e.g., evasion, total clash, straw man.

. refutations may attack evidence or reasoning, or both.

The student is able to:

. define terms to remove ambiguity in the debate.

. assemble major arguments on more than one side of the
  question, providing a broad understanding on which to base
  conclusions.

. test evidence of fact, e.g., completeness, consistency,
  accessibility to observation.

. test evidence of opinion, e.g., qualifications of authority,
  freedom from bias.

. tie evidence together in a chain of reasoning so that
  every general statement is supported by proof and plausible
  argument.

The student values:

. skill and strategy in an effective debate.

		Page	Suggested Grade Placement	District Placement			
SUBJECT:	LANGUAGE ARTS/LITERATURE						
SPECIFIC AREA:	Approaches to the Study of Literature						
	Literary Genre: Novels			8	9	10	11	12

The student knows:

. that novels are classified into types: historical, regional, sociological, mystery, science fiction, and utopian.

. that sociological novels emphasize the influence of economic and social conditions on character and action, and often make a plea for reform.

. that the historical novel utilizes events, people, and settings from history; and intertwines these with fictional material to achieve the desired effects.

. that the regional novel emphasizes the manner in which character and action are affected by the language, customs, values, and landscape of a particular locality.

. that the elements of the novel which are commonly utilized in mystery literature are suspense, foreshadowing and surprise ending.

. that in dealing with time in a novel, a writer may employ chronological sequence, flashbacks, stream-of-consciousness, and multiple narrators.

Grade Placement column: 9-12

The student is able to:

. identify the methods by which characterization is accomplished: character's name, appearance, thoughts, speech, actions, and other's attitudes toward the character.

. state the conflict or problem in a story or novel and explain how the conflict is resolved.

. identify mood produced by the setting.

. identify point of view.

. identify obvious symbolism.

The student values:

. the novel as an important tool for understanding and interpreting reality.

. the novel as a work of art.

. the novel as a source of entertainment and enjoyment.

			Page	Suggested Grade Placement		District Placement			

SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Approaches to the Study of Literature

			Page	8	9	10	11	12
Literary Genre: Short Story								

The student knows:

. that the short story deals with economy of language,   9-12
details, characterization, and setting.

. . that the short story generally has one storyline.

. that in contrast to a novel, the length of a short story
restricts the number of conflicts, themes, fully developed
characters, and generally the time span portrayed.

The student is able to:

.. identify the storyline in a short story.

The student values:

. the short story as a source of enjoyment.

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SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Approaches to the Study of Literature

	Page	Suggested Grade Placement		District Placement		
Literary Genre: Myths, Legends		8	9	10	11	12

The student knows:

- that myths are usually concerned with the activities of gods and superheroes.   [9-12]

- that myths provide imaginative patterns for understanding man and the universe.

- that a myth is not a specific literary work but a floating tale common to the members of a tribe, race, or nation.

- that many cultures share the same myths because of similar needs and concerns.

- that writers frequently make mythological references to clarify and give meaning to their texts.

- that a legend (e.g., King Arthur and the Knights of the Round Table) is a story or collection of stories handed down through oral tradition and popularly regarded as history.

- that legends frequently serve to account for geographic physical phenomena.

The student is able to:

- relate myths to current human concerns.

- relate myths of one culture to another.

The student values:

- myths and legends as insights into universal concerns of men.

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SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Approaches to the Study of Literature

Literary Genre: Folktales, Fables, Parables, Tall Tales			8	9	10	11	12

The student knows:

. that because people face many of the same challenges,   9-12
  similar folktales evolved at different times and places.

. that folklore is the oral transmission of art forms
  (e.g., literature, music, crafts).

. that fables teach a useful lesson about human nature and
  usually personify animals as characters.

. that a parable is a simple, realistic story that
  illustrates a moral or religious lesson.

.. that the moral of a parable is implicit while the moral of
  the fable is explicit.

.. that the tall tale builds upon the exploits of a hero
  through exaggeration of his size, endurance, actions,
  speech and importance.

. that people gain satisfaction from telling and listening
  to tall tales (e.g., entertainment and pride in people
  pitting super strength, power, knowledge and size against
  world forces).

The student is able to:

. identify major folktale motifs.

. identify folktales as a means of expressing the values
  of a culture.

. relate different versions of folktales to different
  cultures.

. relate folktales, fables to current human concerns.

The student values:

. the insight folk literature provides into universal and
  every-day situations, values and concerns.

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SMALL SCHOOLS PROJECT

	Page	Suggested Grade Placement		District Placement		

SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Approaches to the Study of Literature

Literary Genre: · Drama

	Page	Suggested Grade Placement	District Placement			
		8	9	10	11	12

The student knows:

- that drama probably began as a means of explaining religious ritual and doctrine. These plays were called mystery and miracle dramas. — 9-12

- that drama is classified as tragedy or comedy.

- that a tragedy results in disintegration (disaster, death, disorder) following the unsuccessful moral struggle of the hero.

- that comedy achieves integration through the happy, bloodless solution of a problem that has frustrated, embarrassed or distressed the characters.

- that purpose, method and tone of comic forms such as satire, farce, and burlesque.

- dramatic conventions (e.g., chorus masks of Greek Tragedy, dialogue in verse, direct address to audience, asides, soliloquy).

- the characteristic physical elements (stage, lighting, props, costumes) of the ancient, Elizabethan, and modern theatre.

- that there are various types of staging (arena, proscenium, thrust).

- that a scene is a subdivision of an act, and that each scene consists of a unit of action in which there is no change of place or break in the continuity of time.

The student is able to:

- contrast tragedy and comedy in drama.

- identify dramatic conventions, physical elements and staging as a result of watching drama.

The student values:

- the experience of theatre as entertainment.

- the voice of the playwright as a critic of society past, present, and future, and as a commentator on personal relationships.

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UBJECT: _____ LITERATURE

PECIFIC AREA: _____ Approaches to the Study of Literature:

Literary Genre: Biography				8	9	10	11	12

he student knows:

. that a biography is the history of an individual's life
  which provides a particular perspective on the
  individual's personality, milieu and work.

. that an autobiography is written by the subject about
  himself for publication.

. that biographies give information and insight into an
  individual's life or period in history.

. that the biographer's point of view toward the subject
  influences the validity of the work.

he student is able to:

. gain information and insight into an individuals
  life or period in history by reading biographies.

he student values:

. biographies for the insight and information they can
  give on an individual's life or period in history.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	LITERATURE						
SPECIFIC AREA:	Approaches to the Study of Literature						
	Literary Genre: Essay		8	9	10	11	12

The student knows:

- that the essay is a short literary composition on a single subject, usually presenting the views of the author. 9-12

- that the formal essay is a brief prose work in which the author writes as an authority on a subject, presents arguments in an orderly and systematic fashion, and employs a dignified and impersonal tone.

- that the informal essay is a brief prose work in which the author employs a relaxed, humorous, and often whimsical tone.

- that informal essays may be classified according to the author's purpose: descriptive, humorous, critical, satirical, persuasive, instructive, reflective.

The student is able to:

- recognize the essay as a literary form where the author states his opinion on a topic.

The student values:

- the essay as a source of information and personal opinion.

SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement	District Placement				
				8	9	10	11	12

SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Approaches to the Study of Literature

Literary Genre: Poetry

The student knows:

- that poetry has been intrinsic in all civilizations as an expression of love (friendship, nature), a source of amusement (storytelling, songs, nursery rhymes) and an outlet for social and political commentary and criticism.   9-12

- that poetry is heightened speech emphasizing sound, imagery and tone to give a more instant, sensory response than does prose.

- that the basic structure of poetry is the line, and various groupings of lines form stanzas (couplets, triplets, quatrains, etc.).

- that the sound of a poem comes from its rhyme scheme, its metrical pattern and its use of alliteration and onomatopoeia.
  - that rhyme scheme is the pattern of repetition of sounds at the end of the lines.
  - that meter in poetry refers to the pattern of accented and unaccented syllables within a line.
  - that alliteration is the repetition of initial consonants.
  - that onomatopoeia is the use of sound of a word that imitates or resembles what it stands for or describes.

- that imagery is the sensory suggestions the poem creates through use of diction, metaphor, and simile.
  - that diction is the choice and use of words.
  - that metaphor is a figure of speech in which something is named or described to show the likeness between the two things.
  - that simile is a figure of speech in which unlike things are compared, in a phrase introduced by like or as.

- that tone is the attitude revealed by the poet toward the subject.

- that personification is the giving of human qualities to animate or inanimate objects.

- that symbolism is the use of an object or action to represent something else.

- that blank verse is unrhymed, iambic pentameter.

- that free verse is characterized by much rhythmic variation variation, unusual stanzaic forms and either absense of rhyme or loose rhyme patterns.

- that the form of a poem is compatible with and indicative of its subject matter and spirit.

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SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Approaches to the Study of Literature

	Page	8	9	10	11	12
Literary Genre: Poetry (Continued)		8	9	10	11	12

The student knows: (Continued)

- that a folk ballad tells a story handed down orally through dialogue and action, and frequently uses the stanza form, refrain, and stock descriptive phrases. *(Page: 9-12)*

- that an epic is a long narrative poem about the deeds of a traditional heroic figure and reflects the ideals and values of the society which produced it.

- that the narrative is a poem that tells a story and thus has the characteristics of a story.

- that a lyric is a poem which expresses the poet's emotions or sentiments rather than simply telling external events.

- that a sonnet is a poem of fourteen lines in any of several fixed verse and rhyme schemes, typically in rhymed iambic pentameter, which characteristically expresses a single theme.

- that an ode is a poem written in commeration of a great person or deed.

- that an elegy is a poem written posthumously in praise of one deceased.

- that a limerick is a nonsense poem of five lines with a metrical foot consisting of two short syllables followed by a long one, or two unaccented syllables followed by an accented one.

- that Haiku is a major form of Japanese verse which has seventeen syllables, employs highly evocative allusions and comparisons, and creates a single image.

The student is able to:
- identify the elements that give a poem sound.
- identify the imagery in a poem.
- identify words and phrases that appeal to the senses.
- identify the author's tone, theme and symbolism.
- identify a given poem by type.

The student values:
- poetry as a creative expression.
- the sounds, patterns, and structure of poetry.
- enjoyment obtained through poetry.
- the skills involved in crafting a fine poem.
- poetry read aloud.
- the variety of unique ways in which language is used in poetry.

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SUBJECT: LANGUAGE ARTS/LITERATURE							
SPECIFIC AREA: Approaches to the Study of Literature							
Thematic		8	9	10	11	12	

The student knows:

- that a literary work may be significant for a number of reasons: social, historical, economic, religious, philosophic, political. [9-12]

- that people of various cultures often express identical emotions and universal themes in their literature.

- that recurring themes appear in literature, art, music and philosophy.

- That an author expresses ethical values through the ways in which characters react to problems (the choices they make, their statements) and through exposition and the outcome of the story.

- that literature and the arts may reflect the idea that a person's destiny is influenced by the interaction of biological, sociological and psychological factors.

- that Judaeo-Christian themes have had a significant influence in western literature (e.g., guilt, original sin, atonement, retribution, justice, mercy, salvation, absolute morality, fulfillment of human potential, love of fellow man).

- that philosophies such as existentialism, determinism, and humanism have exerted profound, direct and indirect influence on writers (e.g., Camus, Hawthorne, Crane).

- that oriental literature emphasizes certain themes: denial of ego, oneness of living things, unimportance of material comfort.

- that literature reflects conflicts based upon differences in age, attitude, and value (e.g., the rebellious teen-ager, the anti-hero who places no value in the American dream, the criminal).

- that loneliness and alienation can result from the dis-avowal of shared values and failure of communication, and they can be expressed in various ways (e.g., rebellion, ennui, dropping out).

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			Page	Suggested Grade Placement	District Placement			
SUBJECT:	LANGUAGE ARTS/LITERATURE							
SPECIFIC AREA:	Approaches to the Study of Literature							
	Thematic (Continued)				8	9	10	11	12

The student knows:

.. that utopian literature treats man's search for the perfect society and includes themes such as individual freedom, the family unit, education, government, work, leisure time. *(Page: 9-12)*

. that literature reflects that philosophies of life are sometimes characterized by a preoccupation with death.

. that literature reflects that war may force man to a new and more complete knowledge of himself.

The student is able to:

.. identify major themes in literary works.

The student values:

. the thematic approach as an aid in understanding literature.

.. universality of themes in literature, art, music and philosophy.

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SMALL SCHOOLS PROJECT

		Page	Suggested Grade Placement		District Placement		
SUBJECT:	LANGUAGE ARTS/LITERATURE						
SPECIFIC AREA:	Approaches to the Study of Literature						
	Historical/Cultural		8	9	10	11	12

The student knows:

- that much of early literature stems from unique oral traditions of cultures and was later written in the form of myths, ballads, and epics. 9-12

- that oral literature changes as it is retold but remains the same when written.

- that the Greeks contributed the epic, lyric, comic, and tragic forms to literature and the Romans adapted and perpetuated these forms.

- that the early medieval church played a major role in the preservation of the literary traditions.

- that during the Renaissance classical literature was revived and new literature was written reflecting the humanisitic interest in individualism, worldliness, and human potentiality.

- that writers of the Neo-classic movement consciously attemped to attain the restraint, polish, and objectivity of the classics.

- American literature and art were essentially branches of English literature and art until near the middle of the nineteenth century.

- that folk literature has influenced written literature in the United States.

- that an impetus for the Romantic movement was a revolt against the rigid conventions of Neo-classicism.

- that much of American literature has emphasized morality.

- that Naturalism held that humans belong solely to the order of nature and therefore their characters and fortunes are determined by heredity and environment.

- that existential writers maintain that individuals create their own meaning rather than relying upon absolutes such as predestination, universal moral codes, or basic human nature.

- that ethnic groups have made important contributions to literature.

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		Page	Suggested Grade Placement		District Placement		

SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Approaches to the Study of Literature

Historical/Cultural (Continued)

	Page	Suggested Grade Placement	8	9	10	11	12
The student knows:							
that a literary work is a reflection of the time or culture in which it was produced (Beowulf is a reflection of Anglo-Saxon values, religious beliefs, and political attitudes. Huckleberry Finn is a reflection of social values at one stage of American development).		9-12					

The student knows:

- that a literary work is a reflection of the time or culture in which it was produced (Beowulf is a reflection of Anglo-Saxon values, religious beliefs, and political attitudes. Huckleberry Finn is a reflection of social values at one stage of American development).

- that literature may perpetuate the values of a culture.

- that to best understand a work, it should be read from its own historical/cultural point of view (the reader should read Hamlet as if the ghost were real because the audience at the time believed that it was).

- that practices that are not acceptable in one culture may be acceptable in another culture.

- that some cultures have been cut off from the mainstream of culture by repressive circumstances and attitudes (e.g., Blacks, American Indians, Hispanics).

- that literature has perpetuated sex-role stereotypes.

- that literature deals with universal and timeless issues as well as with concerns specific to a time and culture (Moby Dick is built upon 19th century whaling practices, but the conflict between man and nature is still occurring).

- that the author's personal circumstances are a major influence in his literary work.

The student is able to:

- read with understanding from a historical/cultural viewpoint.

- understand that history and culture explain motivation and action.

- identify in a literary work a specific example of a value, issue or point of view different from those held by people today.

- relate the relevant issues in a literary work from a different time and place to the present.

The student values:

- literature as an insight into other times and cultures.

- culture/history as an insight into literature.

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SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Analysis of Literature

                      Elements and Structure | 8 | 9 | 10 | 11 | 12 |

The student knows:

- that the elements of fictional writing include: plot, characterization, setting, mood, theme and point of view and combine to form a unified structure of a literary work.   **[9-12]**

- the meaning of the terminology necessary to analyze literature: fiction, non-fiction, plot, character, theme, setting, tone, atmosphere, point of view, allusion, and symbol.

- the meaning of the terminology needed to analyze and discuss plot development: (e.g., exposition, initial incident, rising action, conflict, climax, anticlimax, falling action, motif, denouement, foreshadowing, suspense, archetypal experience, dramatic irony, parody).

- the meaning of the terminology used to analyze and discuss character: (e.g., dialogue, character foil, archetypes, protagonist, antagonist, motivation, conflict, and empathy).

- the meaning of the terminology needed to analyze and discuss point of view: first person, third person, omniscient.

- that the title, vocabulary, structure, literal meaning and relationship of a poem are used to interpret the author's ideas.

The student is able to:

- analyze a literary work (i.e., describe its parts and their relationship).

- analyze the way in which the theme is developed through characterization, action, setting and point of view.

- identify the general atmosphere or mood produced by the setting.

- analyze rising action, climax and resolution of the main plot and the relationship of the subplots to the main plot.

- recognize the narrative role of the writer (point of view) and how it affects the tone and the reader's interpretation.

- draw inferences from the various ways an author may reveal character (e.g., by what the character says, by what the author tells the reader, by the character's appearance or speech patterns, by what others say about the character, by how others interact with the character).

- analyze the ways in which the elements of poetry work together to form a structure and create a total effect.

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SUBJECT: ___LANGUAGE ARTS/LITERATURE___

SPECIFIC AREA: ___Analysis of Literature___

Author's Use of Language

The student knows:

. the author's style (formal and informal) is characterized by word choices, sentence patterns and point of view.   [Page: 9-12]

. that tone is the writer's attitude toward his subject and audience (e.g., ironic, serious, objective, alienated, satirical, tragic and sentimental).

. a writer may use a pattern of images to contribute to the overall meaning (e.g., the "clothes" images in MacBeth).

. writers frequently allude to mythical characters and events, to Biblical allusions, and to characters and situations found in works of influential writers.

The student is able to:

. determine the writer's purpose as indicated by the genre, tone, mood, language devices and content.

. identify the elements and effect of figurative language in a literary work.

. relate the author's use of suspense and foreshadowing in creating tension that contributes to the reader's interest.

. identify symbolism in literary works.

The student values:

. the author's use of language as it contributes to the drama and depth of a text.

. the variety of unique ways in which language is used in poetry.

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		Page	Suggested Grade Placement	District Placement				

SUBJECT: LANGUAGE ARTS/LITERATURE

SPECIFIC AREA: Personal Application and Relevance

	Page	8	9	10	11	12

The student knows:

. that literature is a source of information, satisfaction, relaxation, stimulation, escape, and challenge. — Page 9-12

. that literature's portrayal of characters can help the student gain insight into his/her own life.

. through literature the possible consequences of conformity and nonconformity (e.g., loss of self-direction, loss of personal identify, ostrocism, persecution).

The student is able to:

. respond subjectively and honestly to a literary work and support a subjective response (i.e., explain why the work was liked or disliked—beyond the "It was dumb" level).

. be more sensitive to beauty and human feeling through reading and applying literature to personal experience.

. come to a deeper understanding of self and others through the empathetic and active reading of literature.

. use the different points of view in literature as a means of looking at her/his own experience.

. expand his/her view of life by identifying with people and situations encountered in literature.

. hypothesize the validity and worth of a literary text.

The student values:

. his/her own response to a literary work.

. literature as an aid in examining his/her own values.

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