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ABSTRACT

Developed by 40 primary teachers and 10 elementary principals from small school districts in Washington, this handbook contains sequenced student learning objectives for grades K-3 in science and social studies and for grades K-8 in reading, language arts, and mathematics. The handbook is designed to assist teachers with the improvement of curriculum and instruction and to aid smaller districts lacking curriculum personnel to comply with Washington's Student Learning Objectives Law. Within each section, all objectives are listed on format pages to allow district personnel to personalize the objectives to meet their own district programs. 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 also 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 of Washington Common Schools, an explanation of the format, and the definition of terms used on the objective format pages.
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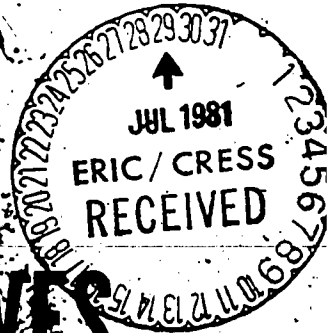
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April 1977

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SMALL SCHOOLS

STUDENT LEARNING OBJECTIVES



ED205313



K-8

Reading • Language Arts • Mathematics

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K-3

Science • Social Studies

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

SMALL SCHOOLS

STUDENT LEARNING OBJECTIVES

K-8

Reading
Language Arts
Mathematics

K-3

Science
Social Studies

3
April 1977

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INTRODUCTION

The Small Schools materials were developed during the school year 1975-76 through the cooperative effort of three levels of educational organizations: local, regional and state. Forty primary teachers and ten elementary principals from small districts in Snohomish and Island Counties (Arlington, Darrington, Granite Falls, Lake Stevens, Lakewood, Monroe, Snohomish, Stanwood, Sultan, South Whidbey and Monroe Christian Schools) developed and sequenced student learning objectives for grades K-3 in five curriculum areas: reading, language arts, mathematics, science and social studies.

During the current school year (1976-77), these objectives were field-tested by primary teachers in the above mentioned districts as well as by primary teachers in districts in Eastern Washington (Methow Valley, Chelan, Entiat, Leavenworth, Peshastin/Dryden, Orondo, Royal City, Washtucna, Wauklake, Quincy, Othello and Wilson Creek). Contained within this book are the objectives, grades K-3, which have been revised based upon the feedback of teachers in pilot districts. Also contained within this book is the working copy of the Small Schools objectives, grades 4-8, for reading, language arts and mathematics. Field testing and revision of these objectives is planned for the 1977-78 school year. These objectives were compiled during the current school year by intermediate and junior high/middle school teachers and principals from the same districts which participated in the development of the primary materials. These educators were assisted by curriculum specialists and ESD 189 and S.P.I. personnel.

Original funding for the project was made available through a Title IV, Part C, grant awarded to the Lake Stevens School District. Technical assistance in the development of the winning proposal was provided by ESD 189 and S.P.I. Since November 1975, funds for the project have been made available through the budget of the Superintendent of Public Instruction, Division of Curriculum and Instruction. ESD 189 and the office of the Superintendent of Public Instruction have worked cooperatively to provide participating districts with curriculum assistance, organizational leadership, editorial services and the publication of materials.

ORGANIZATION OF BOOK

As you will notice, this book is color coded with objectives for each subject listed on different colored paper: reading-green, language arts-yellow, mathematics-blue, social studies-buff and science-pink. All objectives are listed on format pages which allows district personnel to personalize the objectives to meet their own district programs. 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 within 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.

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 and to evaluate each student's performance related to the attainment of the objectives.) Contained within this book are many more objectives than any district would choose to identify as their SLO objectives. In order to provide districts with assistance in identifying objectives which might compose their SLO list, some objectives have been asterisked (*). The selection, shown by asterisks, of student learning objectives within the book by Small Schools personnel is made with the understanding that it serves only as a model of one way district personnel may use the Small Schools objectives to help them meet the requirements of the SLO Law. The asterisking of objectives is not intended to indicate to district personnel objectives which must appear on their SLO list.

All other objectives identified by district personnel, but not included in their SLO list of objectives, may be treated as enabling or supporting objectives to the SLO objectives. For more information concerning the SLO Law, see the Handbook for School District Implementation of the Student Learning Objectives Law available from the office of the State Superintendent of Public Instruction.

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SMALL SCHOOLS PROJECT

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.

FORMAT

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 facilitate the transportability of the product by allowing districts to personalize the curriculum materials to meet their own educational programs.

The format page contained within this book lists the sequence of student learning objectives related to a specific area of the curriculum for either reading, language arts, mathematics, science or social studies. For each objective, a grade placement has been recommended indicating where each objective should be taught and mastered. The grade recommendation is made with the understanding that it applies 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 curriculum materials available in their schools. 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. District personnel may choose to delete an objective by striking it from the list or add another objective by writing it directly on the sequenced objective page.

SMALL SCHOOLS PROJECT - Working Copy							
		Page	Suggested Grade Placement	District Placement			
SUBJECT: Reading			K	1	2	3	4
SPECIFIC AREA: Vocabulary							
The student knows:							
antonyms are words that have opposite meanings, i.e., hot-cold		1		X	X		
top-bottom, night-day		1-3			X	X	
most words have multiple meanings.		2-3			X	X	
synonyms are words that have similar meanings, i.e., large-big, over-above.		2-3			X	X	
homonyms are words that sound the same but have different meanings and spellings, i.e., pear-pair; eight-ate, weight-wait, know-no.		2-3			X	X	
The student is able to:							
quickly recognize the high frequency words, i.e., the, in, is, on, no, a, he, she, go, not, to, you, we and will.		1-3		X	X		
read words in isolation appropriate to his/her instructional level.		1-3					
read unknown words by using context clues in combination with phonetic clues.		1-3		X	X	X	
describe meanings of words in the context of sentences or stories.		1-3		X	X	X	
read and understand the meaning of antonyms appropriate to his/her instructional level.		1		X	X		
read and understand the meaning of synonyms appropriate to his/her instructional level.		2-3			X	X	
read and understand the meaning of homonyms appropriate to his/her instructional level.		2-3			X	X	
The student values:							

Furthermore, this book has been three-hole punched and gummed bound so district personnel may rearrange the pages within a notebook to parallel their district curriculum of classroom teaching units.

SMALL SCHOOLS PROJECT

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, principles 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."

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 proficiency 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 skills necessary to satisfy personal, social, educational, environmental and vocational needs and interests.

SMALL SCHOOLS PROJECT

READING
SCOPE (K-8)

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SUBJECT: Reading.

SPECIFIC AREA: Word Recognition Skills: Visual Discrimination

Page
Suggested
Grade Placement
District
Placement

The student knows:-

- . the relative spacial positions, i.e., left, right, top, bottom, front, back, over, under, on up, down, between.
- . correct directionality when reading and writing; left to right, top to bottom.
- . relative sizes, i.e., large-small, big-little, tall-short.
- . picture clues are important to understanding the written text.

K-1
K-1
K-1
K-2

The student is able to:

- *. identify relative spacial positions, i.e., left, right, top, bottom, front, back, over, under, on, up, down, between.
- . locate the positions left, right, top, bottom on paper. (blank sheet and printed page)
- . progress from left to right and from top to bottom when reading or writing.
- *. distinguish objects according to their size.
- *. identify colors: red, yellow, blue, green, orange, black, brown, purple.
- . match color words with appropriate colors.
- . use visual memory to retain and predict a visual pattern of letters, shapes, numbers.
- *. distinguish likenesses and differences in pictures, letters, and words.
- *. recognize and name the capital and lower case letters of the alphabet.
- . use picture clues to understand a story.

K-1
K-1
K-1
K-1
K-1
K-1
K-1
K-1
K-1
K-2

The student values:

SUBJECT: Reading

SPECIFIC AREA: Word Recognition: Auditory Discrimination

Page
Suggested
Grade Placement
District
Placement

The student knows:

rhyming words end with the same sound, i.e., make-cake, hate-gait
late-weight, late-great.

K-1

K 1 2 3 4

The student is able to:

- listen for likenesses and differences in common sounds, i.e., source, rate, pitch, volume.
- * auditorily discriminate rhyming words.
- * auditorily discriminate consonant sounds.

K-1
K-1
K-1

The student values:

18

SUBJECT: Reading

SPECIFIC AREA: Word Recognition: Phonetic Analysis - Consonants

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . the consonant letter sounds.
- . the two letter consonant blends, i.e., bl, sp, br, cr.
- . the three letter consonant blends (consonant clusters) i.e., spr, scr, spl,
- . the consonant digraphs: ch, sh, th, wh, ng.
- . the sounds made by the letter "s": /s/ as in sun, /z/ as in his, /sh/ as in sure, and /zh/ as in occasion.
- . that the letter "c" has two sounds: "s", soft sound (when followed by the letter i, e or y as in city, cent, circus, cycle) and the "k", hard sound (when followed by any letter other than i, e or y).
- . that the letter "g" has two sounds: generally the "j", (soft) sound as in giant, gem, gym and the "g", (hard) sound as in get, go, give.
- . that some words contain silent consonants, i.e., knows, half, lamb, write, high.
- . that the same sound may be made by different combinations: pf, f; cks, x; ck, k.

	K	1	2	3	4
K-1					
1-2					
2-3					
1-2					
K-3					
1-3					
1-3					
2					
2-3					

The student is able to:

- * . associate a consonant sound with the letter name.
- * . distinguish single consonant sounds in the initial and final position.
- * . associate the sound of two letter consonant blends with the letters that form the blends.
- * . distinguish two letter consonant blends in the initial and final position.
- * . associate the sound of three letter consonant blends (consonant clusters) with the letters that form the blends.
- * . distinguish the consonant digraphs in the initial and final positions.
- * . apply the knowledge and skills about consonants to reading.

K-1					
K-1					
1-2					
1-2					
2-3					
K-2					
1-12					

The student values:

SUBJECT: Reading

SPECIFIC AREA: Word Recognition: Phonetic Analysis - Vowels

Page

Suggested
Grade Placement

District
Placement

K 1 2 3 4

The student knows:

- the short vowel sounds (a, e, i, o, u).
- the short vowel pattern of one syllable words (cvc).
- the long vowel sounds (ā, ē, ī, ō, ū).
- the long vowel pattern of one syllable words (cvc̄).
- two successive vowels frequently represent one sound.
- the sound-symbol relationships of the following vowel combinations (vowel digraphs): oa, ee, ai, ea, ay; (first vowel usually is long and the second is silent).
- blended (linked) sound made by the following vowel combinations (diphthongs): oi, oy, ou, ow, ew, au, aw.
- some vowel combinations make more than one sound: ow, ea, oo, ie.
- the letter "r" following a vowel modifies the vowel sound (murmur sound) so it is neither long nor short, i.e., ar, are, air, ore, or, ear.
- er, ir, or, ar, ur may have the sound of er.

1
1
1-2
1-2
2
1-2
2-3
2-3
2-3
2-3

The student is able to:

- * auditorily discriminate the long and short vowel sounds.
- * read one syllable words with the short vowel pattern (cvc), i.e., hat, red, pen, not, pin.
- * read one syllable words with the long vowel pattern (cvc̄ finale) i.e., make, Pete, pine, note, June.
- * read words with long vowel combinations (vowel digraphs), i.e., road, feed, rain, meat, say.
- * read words with vowel or vowel combinations that make more than one sound, i.e.:
 - ow how, grow
 - ea great, meat, bread
 - oo good, food
 - ie pie, chief
 - y cry, funny
- * read words with blended sounds made by the following vowel combinations (diphthongs), oil, boy, out, how, few, saw, haul.
- * read words in which "r" modifies the vowel sound, i.e., car, care, fair, more, for, near.
- * read words with the "er" sound, i.e., her, fir, dollar, hurt, work.
- apply the knowledge and skills about vowels to reading.

1-2
1
1-2
1-2
2-3
2-3
2-3
1-12

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Word Recognition: Structural Analysis - Rhyming
Endings (Phonograms)

Page
Suggested
Grade Placement
District
Placement

The student knows:

The student is able to:

- . identify common word patterns (rhyming endings or phonograms) as an aid in reading unfamiliar vocabulary, i.e., first grade: an, ate, ail, able, ake, all, ent, eat, oad, ill; second/third grades: ange, ark, eeze, ough, ight.)
- . use the knowledge of word patterns as an aid to reading unfamiliar vocabulary.

1-3
1-12

K 1 2 3 4

The student values:

SUBJECT: Reading

SPECIFIC AREA: Word Recognition: Structural Analysis - Syllables
Compound Words

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

Syllables

- each syllable has a vowel sound.
- * when there are twin or double consonants in a word the word is divided into syllables between the consonants (lit/tle, num/ber) and the vowel sound is short or a schwa.
- * when a word has only one consonant coming between two vowels, either the word is divided before the consonant and the vowel sound is long, i.e., pu/pil, ti/ger, fi/nal; or the word is divided after the consonant and the vowel sound is short, i.e., fin/ish, lem/on, mod/ern.

1-3
2-3
2-3

Compound Words

- a compound word is composed of two or more words that combine their meaning to form a new word and is written as one word.

1-3

The student is able to:

Syllables

- * auditorily identify the number of syllables in words.
- apply syllable generalizations in decoding new words.

1-3
2-3

Compound Words

- * identify the two separate words in a compound word.
- * develop compound words from two or more words.
- apply the knowledge and skills about syllables and compound words to reading.

1-3
1-3
1-12

The student values:

SUBJECT: Reading.

SPECIFIC AREA: Word Recognition: Structural Analysis - Root Words,

Inflected Endings, Prefixes, Suffixes.

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . a root word is the base to which affixed parts may be added.
- . a prefix is a common syllable added to the beginning of a root word and alters the meaning of the root word.
- . a suffix is a common ending or syllable which is added to the ending of a root word and alters the meaning of the root word.

2-3
2-3
2-3

K 1 2 3 4

The student is able to:

- *. read a root word to which an inflected ending has been added: s, es, d, ed, ing, er, est.
 - . use common prefixes in decoding words, i.e., us, in, mis, re.
 - . use common suffixes in decoding words, i.e., le, ly, ful, able, tion, sion.
 - . read words whose endings are formed by:
 - . doubling consonants and add ending (hop, hopping; step, stepped).
 - . changing y to i and add ending (city, cities; happy, happiest).
 - . changing f to v and add s, es (wife, wives; half, halves).
 - . dropping the final e and add ending (hope, Hoping, dine, diner).
 - . adding es to words ending in s, ch, tch, sh, x, o.
- (See Language Arts Grammar for Objectives related to the writing of word endings.)

1-3
2-3
2-3
2-3

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Word Recognition: Structural Analysis - Contractions

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

- a contraction is two words written as one, with one or more letters removed and an apostrophe inserted in that place.

1-3

The student is able to:

- * read contractions with only one letter omitted, i.e., don't, isn't, he's, shouldn't, weren't.
- * read contractions with more than one letter omitted, i.e., won't, I've, we've, we'll.
- * identify the original words in contractions.
- * apply the knowledge and skills about contractions to reading.

1-2

2-3

2-3

1-12

The student values:

SUBJECT: Reading

SPECIFIC AREA: Context and Vocabulary

Page
Suggested
Grade Placement
District
Placement

The student knows:

- context clues tell much about the meaning of unfamiliar words.
- antonyms are words that have opposite meanings, i.e., hot-cold, top-bottom, night-day.
- most words have multiple meanings.
- synonyms are words that have similar meanings, i.e., large-big, over-above.
- homonyms are words that sound the same but have different meanings and spellings, i.e., pear-pair, eight-ate, weight-wait, know-no.

	K	1	2	3	4
1-3					
1-2					
1-3					
2-3					
2-3					

The student is able to:

- * quickly recognize the high frequency words, i.e., the, in, is, on, no, a, he, she, go, not, to, you, we and will.
- read words in isolation appropriate to his/her instructional level.
- read unknown words at his/her instructional level, by using the context clues in combination with phonetic clues.
- describe meanings of words in the context of sentences or stories.
- * read and understand the meaning of antonyms appropriate to his/her instructional level.
- * read and understand the meaning of synonyms appropriate to his/her instructional level.
- * read and understand the meaning of homonyms appropriate to his/her instructional level.

1-3					
1-3					
1-3					
1-3					
1-2					
1-3					
1-3					

The student values:

- reading as an aid to increasing vocabulary.

1-3					
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SUBJECT: Reading

SPECIFIC AREA: Vocabulary: General

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . context is an aid to getting the meaning of the word. 4-8
- . antonyms are words that have opposite meanings, i.e., alert - drowsy, bleak - cheerful. 4-8
- * . most words have multiple meanings. 4-8
- * . synonyms are words that have similar meanings, i.e., over - above, accurate - careful, acquit - pardon, 4-8
- . homonyms are words that sound the same but have different spelling and meanings, i.e., pear - pair, eight - ate, weight - wait. 4-8
- . homographs are words that are spelled the same but have different derivations and meanings, and may differ in
- . pronunciation, i.e., fair (market) - fair (just), object (noun) - object (verb). 4-8
- . the thesaurus is a resource for building vocabulary by identifying synonyms, antonyms and word usage. 6-8
- . an acronym is a word formed by the initial letters of words in a set phrase. 7-8
- . each subject area has vocabulary unique to the discipline. 7-8

The student is able to:

- . use the context of a selection to aid in pronouncing an unfamiliar word. 4-8
- * . use context for the purpose of getting the meaning of an unknown word. 4-8
- * . determine pronunciation and meaning of homographs. 4-8
- . recognize and translate signs/symbols which are critical for international survival. 4-8
- . recognize and interpret abbreviations. 4-8
- * . expand general vocabulary through involvement in reading. 4-8
- . use the thesaurus to locate synonyms, antonyms and specialized vocabulary. 7-8
- . use the specialized vocabulary to increase comprehension in the subject area. 7-8

The student values:

- . and appreciates the power of words. 4-8
- . an expanding meaning vocabulary as an aid to understanding and communication. 4-8

12

SUBJECT: Reading

SPECIFIC AREA: Vocabulary: Root Words, Prefixes, Suffixes

Page

Suggested
Grade Placement

District
Placement

4 5 6 7 8

The student knows:

- . the meaning of common Latin and Greek root (base) words.
- . meaning of prefixes and how they affect the meaning of the root word.
- . meaning of suffixes and how they affect the meaning of the root (base) word.
- . prefixes and suffixes may change the part of speech of a root (base) word.
- . many words in our language have been derived from names or borrowed from different languages.

7-8
4-8
4-8
4-8
7-8

The student is able to:

- . recognize root (base) words.
- * 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 to increase word meaning.

4-6
4-6
7-8
4-8

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Punctuation

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

- . that punctuation marks are an aid to comprehension.
- . that a period signals the end of a statement.
- . that a question mark signals the end of an asking sentence.
- . that a comma signals a pause.
- . that an exclamation mark signals strong feelings.
- . that a comma signals an explanatory phrase, the name of a person spoken to, or the separation of items in a series.
- . a quotation mark signals the words spoken by an individual.
- . an apostrophe signals a contraction or ownership.

1-3
1-2
1-2
1-2
1-2
2-3
2-3
1-3

The student is able to:

- . determine in context the specific strong feeling signaled by the exclamation mark.
- . determine the meaning signaled by commas.
- . determine whether quotation marks are used to indicate words spoken or identify special names or titles.
- . determine that the apostrophe signals a contraction or a possessive.

1-3
1-3
2-3
1-3

The student values:

23

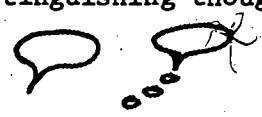
SUBJECT: Reading

SPECIFIC AREA: Comprehension: Punctuation

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the comma signals a pause or series of items.
- 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.
- there are methods of distinguishing thoughts from verbal expressions in cartoons.



4-5
3-8
7-8
6-8
4-8
6-8
4-8
7-8
4-6

4 5 6 7 8

The student is able to:

- use punctuation marks as an aid to getting meaning in silent and oral reading.

4-8

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Literal

Page

Suggested
Grade Placement

District
Placement

K 1 2 3 4

The student knows:

- literal details are stated facts such as names of characters, setting, incidents and time the story or event took place.
- the main idea of a story (selection) or paragraph is an explicit statement which conveys the theme or focus of the story (selection) or paragraph.
- sequence is the order of incidents or actions in a selection.

1-3

1-3

1-3

The student is able to:

- recall details (when explicitly stated) from listening to a selection read orally by another.
- *. locate details (when explicitly stated) after having read a selection.
- *. recall the main idea (when explicitly stated) from a selection read by self or others.
- recall a sequence (when explicitly stated) from listening to a selection read orally by another.
- *. recall a sequence (when explicitly stated) of a selection read by self.
- recall character traits (when explicitly stated) from listening to a selection read orally.
- *. recall cause and effect relationships (when explicitly stated) from listening to a selection by self or others.
- recall comparisons (when explicitly stated) in a selection read by self or others.

K-1

1-3

2-3

K-1

K-1

1-3

2-3

2-3

The student values:

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Literal

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . a pronoun referent identifies a person, place or thing previously named or implied.
- . adverbs answer how, when, where, how often.
- . clue words, i.e., first, then, while, before, after, are an aid in noting sequence.
- . special type (italics, bold face) 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.
- . sequence is the order of incidents or actions in a selection.
- . the main idea of a selection is an explicit statement which conveys the theme or focus of the selection.

4-5
5-8
4-8
4-8
4-6
4-6
4-8

The student is able to:

- * use pronoun referents as an aid in determining meaning.
- * use adverbs to determine how, when where and how often.
- * use clue words as an aid in determining sequence when reading.
- * use special type (italic, bold face, capitals) as an aid to getting the meaning of a written selection.
- * recognize, recall and/or locate 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.

4-6
5-8
3-8
1-8
4-8
4-8
4-8
4-8
4-8
4-8

The student values:



SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Interpretive

Page
Suggested
Grade Placement
District
Placement

The student knows:

- inferred details are those details which the author did not include but could (have) made the material more interesting or appealing.
- the main idea theme or focus may not be (explicitly) stated in the selection.
- some of the events or actions of the story may not be explicitly stated.

	R	1	2	3	4
1-3					
1-3					
1-3					

The student is able to:

- sense emotion/mood of a selection read by self or others.
- * predict outcomes of a selection read by self or others.
- * infer character traits in a selection read by self or others.
- to make generalizations from a selection read by self or others.
- * draw conclusions from a selection read by self or others.
- * infer the main idea of a selection read by self or others.
- infer the literal meanings from the author's figurative use of language.
- make a simple analogy from a selection read by self or others.

K-3					
K-3					
K-3					
K-3					
K-3					
K-3					
3					
3					

The student values:

Page: 1
 Suggested Grade Placement: 4-8
 District Placement: 4-8

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Interpretive

4 5 6 7 8

The student knows:

- ideas, events or actions may be implied rather than stated directly in a selection. 4-8
- an analogy is a comparison of two things that are related in some way. 5-8
- inferred details are those details which the author did not include but could have made the material more informative, interesting or appealing. 6-8
- the main idea, theme or focus may not be stated in the selection. 7-8

The student is able to:

- * infer sequence in a selection. 4-8
- * identify an unstated main idea. 6-8
- * infer character traits from actions, feelings and thoughts of characters. 4-8
- * classify characters, traits, events and personal experiences, times, places and ideas in a reading selection. 7-8
- * infer cause and effect relationships. 4-8
- * draw conclusions and substantiate them with reference to the material read. 7-8
- draw conclusions and generalize to new situations.
- * predict the outcome of a selection. 4-8
- summarize a selection. 4-8
- * recognize relationships between analogous pairs. 4-8
- infer meanings from figurative language:
 - personifications 4-6
 - * idioms, metaphor, simile 4-8

The student values:

- relating personal experiences to stories read (character's actions and feelings). 4-8



SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Evaluation

Page

Suggested
Grade Placement

District
Placement

K 1 2 3 4

The student knows:

The student is able to:

- *. determine whether incidents, events, or characters are real or fanciful from listening to or reading a selection.
- . make judgments of worth, desirability, or acceptability of a character's actions from listening to or reading a selection.

1-3

K-3

The student values:

34

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Evaluation

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . not all material written as fact is true.
- . bias exists in written material.
- . sensationalism is used to get attention.
- . recency of copyright affects the accuracy of material.

6-8
6-8
6-8
6-8

The student is able to:

- . evaluate a selection in terms of recency of copyright information.
- . determine whether a selection or incidents in a selection are real or imaginary.
- * . determine whether a selection or incidents in a selection represent fact or opinion.
- . make judgments of worth, desirability or acceptability of a selection.
- * . 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 or irrelevancy of facts as they pertain to a question to be answered.

4-8
4-6
7-8
6-8
5-8
7-8
7-8
7-8
7-8

The student values:

- . the worth of reading selections to himself/herself as an individual.

4-8

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Appreciation

Page

Suggested
Grade Placement

District
Placement

K 1 2 3 4

The student knows:

The student is able to:

- . make an emotional response to content from listening to a selection read orally.
- . make an emotional response to content of a selection read by self.
- . identify with characters and incidents from listening to a selection read orally by another.
- . identify with characters and incidents from a selection read by self.
- . illustrate or describe mental pictures from listening to a selection read orally by another.
- . illustrate or describe mental pictures from a selection read by self.

K-3

K-3

K-3

K-3

K-3

K-3

The student values:

SUBJECT: Reading

SPECIFIC AREA: Comprehension: Appreciation

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . reading is a source of enjoyment.
- . feelings and emotions are affected by what is read.
- . an individual's experiences influence his/her response to what is read.

4-8
4-8
4-8

The student is able to:

- . sense emotion or mood of a selection.
- . make an emotional response to content.
- . identify with characters and incidents.
- . create mental pictures from reading a selection.

4-8
4-8
4-8
4-8

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.

4-8
4-8
4-8
4-8

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Oral Reading, Silent Reading

Page

Suggested
Grade Placement

District
Placement

K 1 2 3 4

The student knows:

- silent reading always precedes oral reading.

1-3

The student is able to:

- read silently and respond to literal, interpretive and critical questions.
- read silently at his/her independent level.
- read orally with fluency to give meaning to a reading selection.
- use expression appropriate to the selection when reading at his/her instructional level.
- read orally at his/her instructional level to provide information.
- * increase rate of reading and input of information.

1-3

1-3

1-3

1-3

1-3

1-3

The student values:

- reading, and will choose to read silently.
- reading, and will choose to read orally for others.

1-3

1-3

33

SUBJECT: Reading

SPECIFIC AREA: Oral Reading, Silent Reading

Page
Suggested
Grade Placement
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The student knows:

- . the purpose of oral reading is to share a written selection with audience.
- . silent reading precedes oral reading when possible.
- . oral reading slows the rate of reading.
- . the number of new ideas on the page determines rate (fewer ideas--faster rate).
- . to reread silently clears up misunderstandings.

4-8
5-8
4-8
5-8
4-8

The student is able to:

Oral Reading

- . read orally with fluency and expression to give meaning to a reading selection.
- . read orally at his/her instructional level to prove a point, provide information and to show meaning.
- . enunciate clearly and project his/her voice to be heard.

4-8
4-8
4-8

Silent Reading

- . read silently at his/her independent level.
- . 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 complexity of materials.
- . increase rate of reading and input of information.

4-8
4-8
5-8
5-8
4-8

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.

4-8
4-8
4-8
4-8

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Following Directions

Page:
Suggested
Grade Placement
District
Placement

The student knows:

following directions or instructions, written or oral, usually increases ones accuracy and success in school work.

K-3

The student is able to:

- listen and follow an oral one step direction (one task).
- listen and follow an oral two step direction.
- listen and follow an oral three or more step direction.
- read and follow a one step direction.
- * read and follow two step directions.
- * read and follow three or more step directions.

K
K
K-1
1
1-2
2-3

The student values:



SUBJECT: Reading

SPECIFIC AREA: Study Skills: Alphabetizing and Dictionary Skills

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . word definitions are based on parts of speech.
- . guide words are listed at the top of the page and aid in locating words.
- . meaning of the symbols used to indicate pronunciation.

4-8
4-6
7-8

The student is able to:

- . recognize the division of the dictionary to determine in which one-half or one-third the words may be found.
- . locate words in a dictionary alphabetically by:
 - second letter
 - *third letter
 - *fourth letter
- * . utilize guide words to locate words on a page.
- . 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 on words.
- * . use pronunciation key as an aid in reading words.
- * . select appropriate definition to fit the context.
- . recognize that dictionaries vary in completeness, i.e., abridged - unabridged, appendices and additional helps.
- . use the telephone directory, especially the yellow pages to locate information.

4
4
4-5
6
4-6
4
7-8
7-8
7-8
4-8
6-8
6-8

The student values:

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Alphabetizing and Dictionary Skills

Page
Suggested
Grade Placement
District
Placement

The student knows:

- * the alphabetical order of the letter.
- * lists of names are usually arranged in alphabetical order.
- * information contained in a telephone book, dictionary and encyclopedia is listed in alphabetical order.
- * guide words in a dictionary indicate the first and last words on the page.
- * the dictionary is divided approximately in half between the letters M and N.

K 1 2 3 4

K-1
1-3
1-4
2-4
3

The student is able to:

- * alphabetize words by their first letter.
- * alphabetize words by their second letter.
- * alphabetize words by their third letter.
- * alphabetize words by their fourth letter.
- * use guide words in a dictionary to locate words for correct spelling and meaning.

1
2
3
3-4
3-4

The student values:

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Parts of a Book

Page
Suggested
Grade Placement
District
Placement

The student knows:

- * the title is the name of a book or story.
- pictures on the cover or in the book relate to the story or stories in the book.
- * the author is the person who wrote the book or story.
- the illustrator is the person who drew the pictures in the book or story.
- * a table of contents is located in the front of the book and identifies the beginning page of each chapter or story.
- * title page is located in the front of the book and identifies the author, illustrator and publisher.
- publisher is the person or company who (that) publishes printed material.
- * an index is located at the end of the book and lists alphabetically main words, concepts and names of persons or places mentioned in the book and the pages on which they appear.

K-1
K-1
1-2
2-3
2-3
2-4
2-4
2-4
3-4

The student is able to:

- use the table of contents to locate the beginning page of a chapter or story in a book.
- use the index to locate concepts, main words, and names of persons or places appearing in the book.

2-3
3-4

The student values:

- books and takes proper care of them by not (1) marking the pages, (2) folding the corners, and (3) bending the cover so the binding cracks.

K-12

K 1 2 3 4

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Parts of a Book

Page
Suggested
Grade Placement
District
Placement

The student knows:

- * . table of contents lists chapters or sections of a book and page numbers.
- * . the glossary of a book lists important names and definitions on important words found in the book.
- * . the index assists in locating specific information and is usually found in the back of a book.

4

4-6

4-6

The student is able to:

- . use the table of contents.
- . locate the name of the publisher.
- . locate copyright date.
- . use the index to find main topic, subtopic and cross-reference.
- . use the glossary to locate important names and definitions.

4-6

4-6

4-6

4-8

4-8

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Parts of a Newspaper, Production and Distribution of a Newspaper

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . the newspaper is facts, opinions and pictures about his/her community and the world.
- . there are many kinds of information in the newspaper that affect his/her life, i.e., TV guide, sports, weather, advertising, comics, games.
- . people work at many different jobs to produce and distribute the newspaper.
- . the advertising in the newspaper provides people with knowledge about products, prices and services available in the community.
- . newspapers are published on a periodic basis, i.e., daily, weekly, biweekly.
- . the headline tells the story in the briefest possible way.
- . the body of the story tells the story in detail.
- . the size of the headline is related to the article's importance.
- . the placement of an article in the newspaper is related to its importance.

K-3

K-3

K-3

2-3

2-3

1-3

1-3

2-3

2-3

The student is able to:

- . identify the headline and the body of a story.
- . identify pictures and captions.
- . use the index to locate different parts of the newspaper.
- . determine the importance of news by its size and placement.

1-3

1-3

2-3

2-3

The student values:

- . the newspaper for providing many jobs for people in the community.
- . the role of the newspaper as a vehicle for presenting the news.
- . the role of the newspaper as a market place.
- . the role of the newspaper as a voice in the community.

K-3

K-3

1-3

2-3

SMALL SCHOOLS PROJECT

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Library

Page
Suggested
Grade Placement
District
Placement

The student knows:

- how books are catalogued within their school library, in order to select books appropriate to interest and reading level.
- the types of books to be found in the library, i.e., fiction, nonfiction, reference, periodicals.

K 1 2 3 4

1-2

2-3

The student is able to:

The student values:

- the library as a source for learning and pleasure.

1-3

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Locating-Reference/Library

Page

Suggested
Grade Placement

District
Placement

4 5 6 7 8

The student knows:

- . books in the library are shelved in groups according to type, i.e., stories, biography, reference, factual information. 4-8
- . specific books and other materials or groups of books can be located through the card catalog and other visual guides, i.e., shelf labels, wall signs, diagrams. 4-8
- * . the card catalog is arranged in alphabetical order and references subjects, authors or titles. 4-8
- . nonfiction books are divided into ten subject groups (Dewey Decimal System). 5-7
- . that Readers Guide and Subject Index to Children's Magazines index magazine articles alphabetically. 5-8
- . there are specialized references for locating information:
 - . encyclopedias list alphabetically information on a wide range of subjects. 4-8
 - . atlases are a bound collection of maps, tables, charts. 4-6
 - . almanacs are annual publications including calendars, tables and/or other useful information. 7-8
- . vertical files contain pamphlets, clippings, pictures and charts. 4-7

The student is able to:

- * . identify specific types of information found on catalog cards, i.e., author, title, call number, number of pages, annotation. 4-8
- . identify the three main kinds of cards, i.e., author, subject, title. 4-8
- * . use card catalog call number and visual guides to locate books/materials.
- * . locate basic information in magazine index entry, i.e., title of article, title of magazine, pages, date of publication. 5-8
- . use appropriate procedures to locate information in reference materials.
- . use the vertical file to locate needed information. 4-7
- . identify the ten main Dewey Decimal groups and their numbers, i.e., 100, 200, etc. 6-8

The student values:

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Locating Reference/Encyclopedias

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . encyclopedia topics are arranged alphabetically.
- . most encyclopedias have indexes for locating topics that are not main entries.
- . long articles will be divided into subtopics.
- . encyclopedia year-books or annuals update information on subjects.

4 5 6 7 8

4
4-6
4-8
4-8

The student is able to:

- . locate a subject in an encyclopedia.
- * . use the index of an encyclopedia to locate information.
- . use cross reference information that is specifically related to the topic ("see"), and that which is less related ("see also").
- * . use subheadings within an article to locate specific information.
- . obtain information from visuals in the encyclopedia.

4
4-6
4-6
4-8
4-8

The student values:

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Organizing

Page
Suggested
Grade Placement
District
Placement

4 5 6 7 8

The student knows:

- . an outline is a list of topics on a subject arranged in a particular framework. 4-8
- . in an outline, a Roman numeral identifies a main topic. 4-6
- . in an outline, a capital letter identifies a subtopic. 4-6
- . in an outline, a numeral indicates a sub-subtopic. 6-8

See Language Arts: Outlining, Report Writing, Note Taking for other objectives related to this area.

The student is able to:

- . determine the main topic of a well written paragraph 4-5
- . determine the main topic of a paragraph containing two topics. 4-5
- . determine the topic and subtopics of a paragraph. 5-6
- . determine the topics and subtopics of a selection containing multiple paragraphs. 5-6
- . determine the topic, subtopic and details of a paragraph. 6-8
- . make an outline from well written materials which identify topics, subtopics and details. 7-8
- . take notes from an article read. 7-8
- . organize notes into outline form. 7-8
- . make a report (oral or written) using notes in outline form. 7-8

The student values:

SUBJECT: Reading

SPECIFIC AREA: Study Skills: Retention

Page

Suggested
Grade Placement

District
Placement

4 5 6 7 8

The student knows:

- studying in the same time and same place aids remembering. 4-8
- spacing studying aids memory more than studying all at one time. 4-8
- notes must be re-read to have value. 6-8
- when it is appropriate to:
 - take notes, i.e., if the purpose is for discussion. 6-8
 - make an outline, i.e., if the purpose is for reporting. 6-8
 - write a summary paragraph, i.e., if the purpose is to summarize. 6-8

The student is able to:

- paraphrase or restate ideas found in reading. 4-8
- retain general information with the use of aids such as notes and outlines. 6-8
- read notes organized in outline form. 6-8
- read abbreviations, symbols and shorthand used when taking notes. 6-8

The student values:

SUBJECT: Reading

SPECIFIC AREA: Reading in the Content Areas

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . the rate of silent reading depends on the subject matter, the difficulty of the material and the purpose for reading.
- . specialized vocabulary for each subject area.
- * . visual and graphic material is used to get information.
- * . skimming is used to locate the general topic of a paragraph.
- * . scanning is used to locate specific information in a selection.

5-8
4-8
4-8
7-8
7-8

The student is able to:

- . adjust reading rate to purpose and difficulty of material.
- . recognize new vocabulary unique to a specific content area.
- . read material for specific purpose, i.e., main idea, locating facts, substantiating ideas.
- * . read material (graphs, charts, scales, etc.) specific to certain content areas.
- * . preview a selection by skimming to locate topics in order to anticipate content and determine relevancy.
- * . scan a selection for important words and/or sentences in order to locate specific information.
- . retain specific information with complete and accurate recall by using mnemonic devices or repetition.
- . use a formal study technique, i.e.,
 SQ3R (Survey, Question, Read, Recite, Review);
 Read-Verbalize-Read;
 PQ4R (Preview, Question, Read, Reflect, Recite, Review);
 Time-Lapse Reading (read now, wait awhile, read again).

4-8
4-8
4-8
4-8
7-8
7-8
7-8
7-8

The student values:

SMALL SCHOOLS PROJECT

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, creatively and clearly.
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. a) The student adapts speech and writing to different purposes, audiences and communication forms. b) The student uses 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 his/her language.

SMALL SCHOOLS PROJECT

LANGUAGE ARTS
SCOPE (K-8)

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SMALL SCHOOLS PROJECT

SUBJECT: Language Arts

SPECIFIC AREA: Handwriting: Manuscript, Cursive

Page
Suggested
Grade Placement
District
Placement

The student knows:

The student is able to:

- . . draw straight lines, circles and curves.
- . . trace shapes, lines and letters.
- * . write upper and lower case letters in manuscript.
- * . write words using correct manuscript form and spacing.
- . . trace slant lines, ovals and curves.
- * . write upper and lower case cursive letters in slant and joined form.
- * . write words using correct cursive form, slant and spacing.

The student values:

- . . neat and legible handwriting as a means of communication.

	K	1	2	3	4
K-1 K-1 K-2 1-2 2-3 2-3 2-3					
K-3					

SUBJECT: Language Arts

SPECIFIC AREA: Handwriting: Manuscript, Cursive

page

Suggested
Grade Placement

District
Placement

4 5 6 7 8

The student knows:

The student is able to:

- . maintain legibility and efficiency when writing in manuscript form.
- * write cursive letters with correct slant, spacing and size.
- * write words and sentences legibly and efficiently using cursive form.

4-8
4-6
4-6

The student values:

CT
CT

SUBJECT: Language Arts

SPECIFIC AREA: Language: Nature of Language

Page
Suggested
Grade Placement
District
Placement

The student knows:

- language is a system of symbols which represent concepts or ideas, and may be a sound, word phrase, object or behavior.
- language is used to communicate, to give meaning and shape to experiences and to clarify ideas and concepts.
- there are many types of language, i.e., finger spelling, sign language, Morse Code, computer languages.
- language reflects a changing culture and is shaped or determined by the culture's attitudes and values.
- the appropriateness of formal and informal language depends on the situation.
- words and phrases have both denotative and connotative meanings.
- a standard dialect is generally defined as the speech of those most influential in the social, economic, educational and media areas.

4-8
4-8
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4-8
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4-8

The student is able to:

- recognize dialect variations, i.e., pronunciation, rhythm, inflection, distinctive expressions:
- adjust his/her language to various purposes, audiences and communicative forms.
- recognize language that is designed to influence people, i.e., advertising, government.
- use words and phrases that have both denotative and connotative meanings.

7-8
6-8
4-6
6-8

The student values:

- reading writing, speaking and listening.
- the use of words, while recognizing their limitations.
- language variations, i.e., native language, dialects and other variations.

4-8
4-8
4-8

SUBJECT: Language Arts

SPECIFIC AREA: Grammar: Nouns, Pronouns, Adjectives, Verbs,

Adverbs, Subject, Predicate

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

- some words (nouns) name persons, places or things.
- * some words (proper nouns) name particular persons, places or things and always begins with a capital letter.
- some words (pronouns) are used in place of nouns.
- some words (adjectives) describe nouns or pronouns.
- most action words are verbs.
- most sentences contain a subject and a predicate.
- some words (adverbs) describe verbs, adjectives or another adverb.

1-2

1-2

2-3

K-3

3

1-3

2-3

The student is able to:

- * identify words that are names of people, places or things.
- distinguish between a proper and common noun.
- * identify words (verbs) that show action.
- * identify subject-verb agreement in sentences.

2-3

2-3

1-3

3

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Language: Grammar - Parts of Speech

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . a noun names persons, animals, places, things or ideas.
- . a pronoun is used in the place of a noun.
- . verbs are words used to express action or state of being.
- . adjectives are words that modify nouns and pronouns.
- . most adverbs modify verbs, adverbs and adjectives.
- . some adverbs modify adverbs and adjectives.
- . prepositions are words which identify place or direction, i.e., on, up, over, across, in, from.
- . prepositional phrases always begin with a preposition and end with a noun.
- . prepositional phrases can function as adjectives or adverbs.
- . conjunctions are words that join words, phrases and clauses, i.e., and, but, or, neither, nor, either, both.
- . interjections are words that express strong feeling, i.e., wow, oh, ouch.

	4	5	6	7	8
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4-6					
4-6					
4-6					
5-8					
6-8					
5-8					
7-8					
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7-8					

The student is able to:

- * . identify nouns by their singular and plural forms.
- * . identify nouns by their signals (determiners) and by their position.
- * . distinguish between the various kinds of nouns: common and proper.
- * . identify pronouns.
- * . identify prepositional phrases.
- * . identify verbs.
- * . identify verbs by form and position.
- * . identify adjectives.
- * . identify adjectives by position and by variant forms.
- * . identify adverbs.
- * . identify adverbs by position and meaning.

4-6					
7-8					
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7-8					
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The student values:

UBJECT: Language Arts

PECIFIC AREA: Language: Grammar - Sentences

Page

Suggested
Grade Placement

District
Placement

4 5 6 7 8

he student knows:

- . a sentence consists of subject and predicate.
- . a simple sentence consists of one independent clause.
- . a compound sentence consists of two or more independent clauses.
- . a complex sentence consists of one independent and one or more dependent clauses.
- . that word order is essential to meaning in English sentences.
- . sentences can be classified into patterns according to their structure.
 - . Examples of sentence patterns:
 - . Pattern I The fire burns. (subject, verb)
 - . Pattern II The dog bit the man. (subject, verb, object)
 - . Pattern III My dog is a collie. (subject, verb and subjective complement)
 - . Pattern IV The air is cold. (subject, verb, adjective complement)
 - . Pattern V Bill gave the dog a bone. (subject, verb, indirect object, direct object)
 - . Pattern VI The class elected Bob president. (subject, verb, object, objective complement)

4-6
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7-8
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7-8

he student is able to:

- . recognize a complete sentence.
- . identify the subject and predicate in a sentence.
- . recognize subject--verb agreement in sentences.
- . use terminology to identify sentence patterns.

4-6
4-6
4-8
7-8

he student values:

Page
Suggested
Grade Placement
District
Placement

UNIT: Language Arts

SPECIFIC AREA: Usage

K 1 2 3 4

The student knows:

The student is able to:

- use common and proper nouns correctly in sentences.
- use words (adjectives) in describing a person, place or thing.
- use action words (verbs) correctly in sentences.
- use the present, past and future forms of the irregular "to be" verbs in standard English, i.e., am, is, are, was, were, will, shall.
- use adverbs in describing verbs, adjectives or other adverbs.
- use "a" and "an" correctly in writing.
- use pronoun forms correctly.
- write sentences with correct subject verb agreement.

1-3

2-3

1-3

2-3

3

2-3

1-3

3

The student values:

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Language Arts

SPECIFIC AREA: Language: Usage

4 5 6 7 8

The student knows:

- usage is a matter of appropriateness and social acceptance. 4-8
- usage of grammar is important in the process of communication. 4-8
- most adverbs modify verbs and answer questions beginning with how, when and where. 4-8
- conjunctions are words used to join words, phrases or clauses in sentences, i.e., and, but, either, or, both. 4-8
- interjections are words used to express strong feelings, i.e., oh, ouch. 4-8
- prepositions are words which identify place or direction, i.e., up, on, across. 4-8

The student is able to:

- * use negatives appropriately, i.e., no, not, never, nobody, nothing, nowhere, don't, doesn't, can't, hardly. 4-8
- substitute the correct pronouns for nouns. 4-8
- * use pronouns correctly in the subject-object position. 7-8
- use pronouns correctly in writing sentences with compound subject, i.e., John and (I, me) went to the game. 4-8
- select the correct nominative pronoun in a compound subject or predicative nominative position. 7-8
- use reflective pronouns correctly, i.e., herself, ourselves, etc. 7-8
- select the correct objective pronoun in compound objective positions. 7-8
- write the appropriate comparative forms of regular adjectives, i.e., big, bigger, biggest. 4-8
- use correct comparative forms of common adjectives, i.e., good, better, best, more beautiful, most beautiful. 6-8
- * select the verb form, singular or plural, which agrees with the subject, i.e., The boy (run, runs) to the park. 4-8
- use helping verbs correctly, i.e., is, was, were, are, have, has, had. 4-8
- * use the correct present, past, future and past participle form of verbs: 3-4
 - do, see, run, sit, have, eat, begin, give, take.
 - know, grow, throw, be, write, catch, ride, bring, break, choose, come. 6-8
 - draw, fall, ring, speak, steal, take, wear, tear and swim. 7-8

The student values:

61

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: General

Page
Suggested
Grade Placement
District
Placement

The student knows:

- there are various purposes for writing, i.e., to inform, to explain, to entertain, to persuade.

4-8

The student is able to:

- generate ideas by observing, reading, discussing, experiencing.
- write about things, behaviors and ideas that he/she values.
- draft ideas freely.
- adapt writing to the audience and purpose.
- adjust tone and style according to audience and purpose.
- examine his/her writing objectively.
- use formal or informal language to suit the situation.
- identify values and value principles through the analysis of his/her statements, decisions and behaviors.

4-8
4-8
5-8
5-8
7-8
7-8
7-8
7-8

The student values:

- writing as a way to help the writer clarify ideas and feelings.
- writing as a means of communication.
- writing as a means of self-expression.
- the writing of classmates and others.

5-8
5-8
5-8
5-8

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical Capitalization

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

- the first letter of particular names, places or things (proper nouns) is capitalized.
- the first letter of the beginning word of a sentence is capitalized.
- the pronoun "I" is capitalized.
- the first letter of titles of respect is capitalized, i.e., Mr., Mrs., Dr., Sir.
- titles of books are capitalized.
- initials are the first letter of names and are capitalized.
- the first letter of the beginning word in a quotation is capitalized.

1-3

1-2

1

2-3

2-3

3

3-5

The student is able to:

- * capitalize the first letter of his/her name.
- * capitalize the pronoun "I."
- * write a sentence using a capital letter at the beginning of the first word.
- * capitalize the first letter of particular names, places or things (proper nouns).
- * capitalize the first letter of titles of respect, i.e., Mr., Mrs., Dr.
- * capitalize initials.
- * write a simple, direct quotation using a capital for the first letter.

K-1

K-2

1-2

2-3

3

3

3-5

The student values:

63

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical-Capitalization

Page
Suggested
Grade Placement
District
Placement

The student knows:

The student is able to:

- . Use capital letters when writing:
 - *. proper nouns, i.e., Bill, Spain, April.
 - *. abbreviation of proper nouns, i.e., Feb., Dr., Sat.
 - *. the first word of the greeting and closing of a letter, i.e., My Dear Bill, Sincerely Yours.
 - *. titles of respect, i.e., Queen Elizabeth, Mr. President.
 - *. the first word in a line of traditional poetry, i.e.,
 Our fears in Bangou
 Stick deep: and in his royalty of nature
 Reigns that which would be feared.
 Shakespeare
 - *. direct quotations, i.e., she asked, "May I assist you?"
 - *. titles of books, stories, tv programs, works of art, i.e.,
 A Tale of Two Cities, Blue Boy, Upstairs, Downstairs.
 - . proper adjectives, i.e., Roman customs, Belgian hare.

4
4
4
4-5
4-6
5-6
5-6
5-7

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical-Punctuation

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

- a period is used at the end of a statement (telling sentence).
- a question mark is used at the end of a question (asking sentence).
- an exclamation mark is used to show strong feelings.
- periods are placed at the end of abbreviations, initials and titles.
- a comma comes after a greeting in a letter.
- a comma comes after a complimentary close of a letter.
- commas separate date and year.
- a comma separates city and state.
- commas separate words in a series.

1-2
1-2
2-3
3-4
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2-3

The student is able to:

- * place a period at the end of a sentence that is a statement.
- * place a question mark at the end of a sentence that asks a question.
- * place an exclamation point at the end of a sentence that shows strong feeling.
- * use a comma to separate date and year.
- * use a comma to separate city and state.
- * use a comma to separate words in a series.
- * use a period in abbreviations, initials and titles.

1-2
1-2
2-3
2-3
2-3
3-4
3-4

The student values:

65

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Punctuation

Page
Suggested
Grade Placement
District
Placement

The student knows:

- a declarative sentence makes a statement and ends in a period, i.e., Some mushrooms are edible. 4-8
- an interrogative sentence asks a question and ends with a question mark, i.e., Is this mushroom edible? 4-8
- an imperative sentence makes a request or gives a command and ends with a period, i.e., Please pick only edible mushrooms. 4-8
- an exclamatory sentence expresses strong feelings or emotions and ends with an exclamation point, i.e., This mushroom is poisonous! 4-8

The student is able to:

- punctuate declarative, interrogative and exclamatory sentences. 4-8
- use Commas to punctuate:
 - words, phrases and clauses in a series. 4-8
 - addresses, dates and letters. 4-6
 - introductory words, phrases and dependent clauses. (If you don't hurry, you'll be late.) (No, you can't go.) 4-8
 - coordinating conjunctions. (He wanted to go to Mexico, but he wanted to learn the language first.) 7-8
 - interrupting elements: parenthetical expressions, nouns of appositives. (Our house, which was ten years old, burned to the ground.) (Come in John, and help.) (John, however, said no.) 7-8
 - direct quotations. 4-8
- use Apostrophes to punctuate:
 - contractions. 4-8
 - possessives (both singular and plural). 6-8
- use Quotation Marks to punctuate:
 - titles of short stories, articles, songs, poems. 4-8
 - direct uninterrupted quotations. 4-8
 - direct interrupted quotations. 7-8
 - dialogue. 7-8
- use Hyphens to punctuate:
 - compound numbers. 4-6
 - words divided at the end of a line. 4-8
 - compound words, i.e., brother-in-law. 6-8

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Punctuation

Page
Suggested
Grade Placement
District
Placement

The student knows:

The student is able to:

- use Semi-Colons to punctuate:
 - compound sentences, i.e., The man ran into the curbing; he couldn't believe his eyes.
 - compound complex sentences, i.e., The man, who was careful by nature, ran into the curbing; he couldn't believe his eyes.
- use Colons to punctuate:
 - the greeting of a business letter, i.e., Dear Mr. Smith:
 - lists, i.e., ...includes the following: grain, apples, lumber.
 - hours and minutes, i.e., 9:25 a.m.
- use Periods to punctuate:
 - abbreviations, i.e., Sat., Sept.; Dr.
- Use Underlining:
 - when writing titles of books, i.e., Tale of Two Cities.
 - magazines, i.e., Newsweek.
 - plays, i.e., Taming of the Shrew.
 - names of newspapers, i.e., Everett Herald.

7-8
7-8
5-8
5-8
4-8
6-8
6-8
6-8
6-8

The student values:



SMALL SCHOOLS PROJECT

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Plurals, Possessives

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . plural means more than one.
- . words (nouns) which name more than one of a person, place or thing are plural and are usually formed by adding "s" or "es."
- . plurals of some words are formed in irregular ways, i.e., goose - geese, mouse - mice, deer - deer.
- . singular possessive ('s) designates ownership by the individual.
- . plural possessive (s') designates ownership by more than one individual.

1-2
1-2
3-6
3-6
4-6

The student is able to:

- . write words in which the plural has been formed in the following ways:
 - *. adding "s", i.e., girl-girls, monkey-monkeys.
 - *. adding "es" to words ending in s, ch, tch, sh, x, o.
 - *. changing y to i and adding es, i.e., city-cities, baby-babies.
 - *. changing f to v and adding es, i.e., wife-wives, half-halves.
- . write words in which the singular possessive is formed by adding 's.
- . write words in which the plural possessive is formed by adding s'.

1-2
3-6
4-6
4-6
3-4
4-6

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Sentences,

Paragraphs

Page
Suggested
Grade Placement
District
Placement

The student knows:

- a sentence is a group of words that express a thought or idea and has a subject and predicate.
- ideas are expressed in related sentences.
- ideas are organized into paragraphs.
- a good paragraph has a topic sentence.
- all sentences in a paragraph are related to the same topic.

1-3
1-3
3
3
3

The student is able to:

- contribute ideas to class stories recorded by an adult or older student.
- generate ideas for topics by reading, thinking, observing and talking with others.
- * write a complete sentence.
- * write two or more related sentences.
- report a personal experience in writing.
- write a response to a literary selection.
- write the main events of a story in sequence.
- * identify a paragraph composed of a topic sentence and related sentences.
- * identify a topic sentence in a paragraph.
- write a paragraph with a topic sentence and at least two related sentences.

K-1
1-3
1
1-2
2-3
2-3
2-3
3
3-4
3-4

The student values:

- the rights of classmates and other people to express themselves through writing.
- writing as a way to express personal ideas and opinions.

K-3
K-3

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Sentences

Page
Suggested
Grade Placement
District
Placement

The student knows:

- a sentence usually expresses a complete thought.

4 5 6 7 8

4

The student is able to:

- * write a complete simple sentence, i.e., John saw the train. Some dogs barked. Most birds are small. The man is a teacher. Mother bought me some candy. Ann called this tree a maple.
- * write statements, questions, commands and exclamations.
- * answer a question with a clear and complete written sentence.
- combine in writing basic sentence patterns by coordination, i.e., and, but, or.
- combine in writing basic sentence patterns by subordination, i.e., therefore, hence.

4
4-6
4-6
7-8
7-8

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Paragraphs

Page
Suggested
Grade Placement
District
Placement

The student knows:

- a paragraph has one main idea.
- a paragraph usually has a logical arrangement of details.
- a paragraph usually has a topic sentence.

4-8
4-8
6-8

The student is able to:

Given Materials

- * write a paragraph of at least three sentences when given a topic.
- organize and write details into a unified (single topic) paragraph when given material.

4-5
5-6

Original Paragraphs

- select a paragraph topic.
- formulate supportive details for selected paragraph topic.
- * formulate conclusion for paragraph.
- formulate transitory statement for paragraph writing.
- * write an expository paragraph with topic sentence, supporting details and conclusion (at least five sentences).

6-8
6-8
6-8
7-8
6-8

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Outlining

Page
Suggested Grade Placement
District Placement

The student knows:

- . Roman numeral in an outline identifies a main idea (topic).
- . capital letters in an outline identifies a subtopic.
- . a numeral in an outline identifies a detail.

4-8
4-8
4-8

The student is able to:

- . determine the main idea (topic) of a paragraph.
- . make an outline from given material which identifies the topic and subtopics of a paragraph.
- . make an outline from given material which identifies the topics and subtopics of multiple paragraphs.
- . identify supportive details of a paragraph.
- . make an outline from given material which identifies topics, subtopics and supportive details.
- . make an outline identifying the topic and subtopic for writing an original paragraph.
- . identify supportive details to be included in original writing.
- . make an outline identifying topics, subtopics and details for multiple writing in original writing.

4-5
5-6
5-6
6-8
6-8
6-8
6-8
7-8

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Report Writing

(Including Notetaking)

Page
Suggested
Grade Placement
District
Placement

The student knows:

- a report is the organization of ideas and information on one topic.
- parts of a report include: Title Page, Table of Contents, Introduction, Body, Conclusion and Bibliography.
- the purpose of a report may be to inform, persuade, entertain.
- the proper sequencing of the steps (procedure) to be taken when writing a report: theme (given or selected) narrow it to a topic, research (notetaking, outlining); formulate table of contents; write introduction, body, conclusion, bibliography.

7-8
7-8
7-8
7-8

The student is able to:

- do research for given or selected topic, i.e., notetaking and outlining.
- select a dominant category from topic outline to form the body of the report.
- construct a Title Page which includes a title, author and date.
- * • construct a Table of Contents from a topic outline.
- * • write an introduction which arouses interest and which expresses the main idea and purpose of the report.
- write body of report in coherent, related paragraphs based upon the dominant categories of the topic outline.
- * • write a logical and concise conclusion.
- write a bibliography which includes all sources of information using correct format.
- put report together in an acceptable (booklet) form.

7-8
7-8
7-8
7-8
7-8
7-8
7-8

The student values:

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Practical - Proofreading

The student knows:

- . the first draft of writing usually requires proofreading and revision.
- . communication may be obscured by careless errors.

4-8
4-8

The student is able to:

- . use proofreading to correct errors in: spelling, usage, punctuation, legibility, tense, voice.
- * . recognize and correct sentence fragments.
- . revise sentence structure.
- . recognize and eliminate trite expressions and cliches.
- * . recognize and revise run-on sentences.
- . evaluate written material and edit for clarity.

4-8
4-6
5-7
6-8
5-8
6-8

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Letter Writing - Social

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the heading in a social letter is located at the top right side of the page and contains street address, city and state and date.
- the greeting in a social letter is spaced below the heading, begins at the left margin, usually includes "Dear" followed by the name of person being addressed and followed by a comma.
- the body of the social letter follows below the greeting and contains a message.
- the closing in a social letter is centered below the body, towards the right and is followed by a comma, i.e., Yours truly, Sincerely, Love.
- the signature of the writer is placed below the closing.
- the title and the name and address of the receiver is placed in the center and to the right on an envelope.

3-4
2-3
2-3
2-3
2-3
3-4

The student is able to:

- * write a social letter containing a heading, greeting, body, closing and signature.
- * address an envelope using correct capitalization, punctuation and form.
- * address an envelope using correct capitalization, punctuation and form for a return address.

3-4
3-4
4-5

The student values:

- letter writing as a means of personal communication.

1-3

K 1 2 3 4

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Letter Writing - Business

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . the heading in business letters is located at the top right side of the page and contains street address, city and state and date. 5-6
- . the inside address is located at the left margin below the heading and contains the name and address of the person or firm who is to receive the letter. 5-6
- . the greeting in a business letter is spaced below the heading, begins at the left margin, usually includes "Dear" followed by name of person being addressed or may be written, Dear Sir: or Dear Ms. Smith:. 5-6
- . the body of the business letter follows below the greeting and contains a message. 5-6
- . the closing in a business letter is centered below the body, towards the right and is followed by a comma, i.e., Yours truly, Sincerely,. 5-6
- . the signature of the writer is placed below the closing. 5-6
- . the title and the name and address of the receiver is placed in the center and to the right on an envelope. 5

The student is able to:

- * write a business letter containing a heading, inside address, greeting, body, closing and signature. 5-6
- . address an envelope using correct capitalization, punctuation and form. 5-6
- * address an envelope using correct capitalization, punctuation form and return address. 5-6

The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Written Expression: Creative Writing

Page
Suggested
Grade Placement
District
Placement

The student knows:

- See Language Arts: Literature for definitions of plot, setting, etc.

The student is able to:

- draft ideas freely.
- describe in writing a character using:
 - physical characteristics
 - physical characteristics and actions
 - physical characteristics, actions, thoughts and attitudes.
- write using imaginative point of view.
- write a response to a literary selection.
- write a vivid description.
- write a story using dialogue.
- write a description of an incident from first person and third person point of view.
- write an original verse and/or poetry.

The student values:

4-8
4-5
6-7
7-8
4-8
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7-8
7-8
7-8
4-8

4 5 6 7 8

SMALL SCHOOLS PROJECT

SUBJECT: Language Arts

SPECIFIC AREA: Listening

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . good listening habits, i.e., focusing attention on speaker, not talking to others, refraining from interrupting the speaker.
- . paraphrasing is using words to restate what has been said by another.

K-3
2-3

The student is able to:

- * . follow oral direction(s).
- . experience enjoyment through listening.
- * . listen for details and specific information.
- . paraphrase what has been said by another.

K-3
K-3
K-3
2-3

The student values:

- . listening for enjoyment.
- . listening to gain information.

K-3
K-3



SUBJECT: Language Arts

SPECIFIC AREA: Listening

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the various purposes for listening, i.e., information, enjoyment, necessity.
- good listening habits, i.e., focusing attention on speaker, not talking to others, refraining from interrupting the speaker.

4-8
4-8

The student is able to:

- demonstrate courtesy in a listening situation.
- listen and follow directions.
- listen and identify the main idea from audiovisual presentations, class interactions and discussions.
- listen and paraphrase what is said from audiovisual presentations, lectures and class discussion.
- listen and recall details from audiovisual presentations, lectures and class interaction.
- listen and ask pertinent questions about what is said.
- listen and evaluate what is said.
- listen and summarize what is said.

4-8
4-8
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5-8
6-8

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.
- verbal communication as a means of becoming aware of another person's point of view.

4-8
4-8
4-8

SMALL SCHOOLS PROJECT

SUBJECT: Language Arts

SPECIFIC AREA: Speaking

Page
Suggested
Grade Placement
District
Placement

The student knows:

- effective speech depends on clarity, rate and adequate volume.
- conversation depends upon courtesy and respecting others' ideas.

K-1 2 3 4

1-3
2-3

The student is able to:

- express complete ideas through speech.
- speaking in phrases and complete sentences.
- relate personal experiences through speech.
- is able to use related ideas in describing objects or people.
- ask questions to clarify meaning or obtain information.
- follow rules of courtesy in group discussions.
- express ideas in conversation with another individual or small group.
- speaking clearly at a rate and volume understood by others (check list for teachers).

K-1
K-3
K-3
K-3
K-3
K-3
K-3
1-3

The student values:

- speaking effectively before a group.

K-3

SUBJECT: Language Arts

SPECIFIC AREA: Speaking

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the basic courtesies of speaking.
- the use of language adapted to different audiences (both formal and informal).
- ideas, attitudes and feelings are also conveyed in nonverbal ways, i.e., facial expressions, gestures.
- a speech topic should be of interest to both the speaker and the audience.
- the various purposes of speaking are to inform, entertain and persuade.
- techniques of good speaking include maintaining eye contact, clear enunciation, appropriate expression, appropriate gestures, volume, rate and tone.

4-8

4-8

5-7

5-7

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4-8

The student is able to:

- converse informally with peers, younger children and adults, while observing basic courtesies.
- retell a story based on what he/she has seen, thought, heard or read.
- ask questions to clarify meaning or get information.
- present an oral report individually or as a member of a panel.
- give oral directions in logical and/or sequential order.
- contribute to group discussions in order to provide relevant ideas, extend ideas, air opinions, solve problems.
- evaluate evidence, draw conclusions and qualify ideas, opinions and conclusions.
- deliver a prepared speech for a specific purpose, i.e., persuade, entertain, inform.
- conduct an interview.
- give an impromptu speech.
- is able to evaluate his effectiveness as a speaker.
- take issue with a speaker discussant without insulting the character of the other person.

4-8

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7-8

The student values:

- and respects the thoughts and opinions of others expressed through speech.
- speaking effectively before a group.
- using the techniques of good speaking (see knowledge).

4-8

4-8

4-8

SMALL SCHOOLS PROJECT

SUBJECT: Language Arts

SPECIFIC AREA: Drama

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

- that drama is a form of creative expression and movement which is often used to entertain.
- there are various techniques of dramatic presentation such as puppet shows, shadow plays, finger plays, movies or dramatic plays.

K-3
K-3

The student is able to:

- engage in a creative dramatic play based on spontaneous experiences or stories read or heard.
- express feelings and thoughts freely in dramatizing with puppets, shadow plays, finger plays, movies or dramatic plays.
- interpret characters through pantomime, charades and role playing.

K-3
K-3
K-3

The student values:

- creative dramatics as a form of self-expression.

K-3

SUBJECT: Language Arts

SPECIFIC AREA: Drama

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the various techniques of dramatic interpretation, i.e., improvisation, role playing, pantomime, puppetry.
- drama is a form of creative expression and movement often used to entertain.

4-8
4-8

The student is able to:

- use various techniques of dramatic interpretation, i.e., improvisation, role playing, puppetry, pantomime:

4-8

The student values:

- drama as a form of self expression.
- drama and enjoys observing and/or participating in dramatic presentations.

4-8
4-8

SMALL SCHOOLS PROJECT

SUBJECT: Language Arts

SPECIFIC AREA: Literature: Prose

Page
Suggested Grade Placement
District Placement

The student knows:

- the broad scope of literature includes fairy tales, folk tales, fables, biographies, familiar classics, etc.
- that most stories present a problem or conflict that is resolved.
- that basic elements of a story include plot, characters and setting.
- a fairy tale is a type of folk tale involving supernatural creatures.
- some animal stories are imaginative and some are realistic.
- a folk tale is a story made up by persons in a culture from their experiences.
- a fable is a moral tale often involving animals.
- literature often gives human characteristics to nonhuman things.
- some literature tells about realistic characters and situations.
- some literature tells about imaginary characters and situations.
- a tall tale is a kind of folk tale that builds upon exploits of a hero through exaggeration of size, endurance, actions, speech and importance.
- biography is the history of an individual's life.
- an adventure story can be either real or imaginary, and it describes adventurous experiences in the life or lives of the main characters.
- informational books provide true information about a wide variety of topics.

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K-3

K-3

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K-3

The student is able to:

- * distinguish between realistic literature and imaginary literature

2-3

The student values:

- many kinds of children's literature for the diversity, imaginativeness and enjoyment it gives the reader.
- an increasing awareness of various cultural attitudes and customs gained through literature.
- literature as a means of vicarious experience gained through the identification with the problems and emotions of others.

1-3

K-3

2-3

SUBJECT: Language Arts

SPECIFIC AREA: Literature: Prose - Types of Literature

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the broad scope of literature includes fairy tales, folk tales, fables, myths, biographies, autobiographies, poetry, short stories, plays and novels.*

- fiction is a created story which can depict either reality or fantasy.

- nonfiction relates factual situations and information.

- a legend is a story or collection of stories handed down through oral tradition and is popularly regarded as history.

- an autobiography is the history of an individual written by himself/herself.

- a myth is a story created by ancient cultures to explain the nature of man and the universe.

NOTE: See Small Schools, K-3, Literature for definition of fairy tales, folk tales, fables, tall tales and biography adventure.

4 5 6 7 8

4-8

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4-6

4-6

4-8

5-8

The student is able to:

- distinguish between real and imaginary elements in a fictional story.

- distinguish between fiction and nonfiction in literature.

4

4-6

The student values:

- enjoyment obtained through literature.

4-8

- the understanding of self and others gained through identification with the problems and emotions of characters.

6-8

- literature as a means of obtaining information and awareness of cultural attitudes and customs.

6-8

- his/her own response to literature.

4-8

- the response of others to literature.

4-8

CC 15

SUBJECT: Language Arts

SPECIFIC AREA: Literature: Prose - Elements of Literature

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the elements of a story include plot, character and setting.
- the plot of a story presents a problem or conflict that is usually resolved.
- the climax is the point of highest interest or turning point of the story.
- resolution of the story is the point where the conflict is resolved.
- the sequence of incidents of a plot may be interrupted by flashbacks, subplots, prologues, parallel episodes and similar devices.
- introduction establishes feeling (mood) and gives setting.
- character creation gives history and realism to characters.
- 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.
- mood refers to the atmosphere of a selection and is described in terms of human emotions and works with other elements to give shape to a whole pattern.

4-8

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The student is able to:

- identify the main characters in a selection.
- determine what a character is like by drawing inferences from the various ways in which an author may reveal character, i.e., by what 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.
- state the conflict or problem in a story or play.
- identify the climax or turning point of the story.
- 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 general atmosphere or mood produced by the setting.

4-6

4-8

4-8

7-8

4-8

7-8

7-8

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The student values:

SUBJECT: Language Arts

SPECIFIC AREA: Literature; Poetry

Page
Suggested
Grade Placement
District
Placement

The student knows:

- that some forms of poetry have rhymed patterns and some forms of poetry have non-rhymed patterns.
- the figurative language used in poetry is not to be interpreted literally.

2-3
2-3

The student is able to:

- contribute ideas to class poems (rhymed and nonrhymed).
- identify and interpret figurative language used in poetry.
- write simple rhymed and nonrhymed poetry.

K-1
2-3
2-3

The student values:

- many kinds of children's literature for the diverse imaginativeness and enjoyment it gives the reader.
- poetry as a form of creative expression.
- poetry for the variety of unique ways in which language is used, i.e., sounds and patterns.

K-3
K-3
K-3

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Language Arts

SPECIFIC AREA: Literature: Poetry

The student knows:

- poetry has a variety of forms:
 - couplet, quatrain, triplet, limerick
 - cinquain, haiku, free verse
 - tonka, lyric, ballad, sonnet, blank verse.
- stanza refers to the formal divisions in the organization of a poem.
- that symbolism is the use of an object or action (the symbol) to stand for something else.
- alliteration is the likeness of sounds at the beginning of words.
- onomatopoeia is the imitation of the natural sound associated with the object or action involved, i.e., rumbled, buzzed, clanked.
- personification is a form of comparison in which something that is not a person is spoken of as if it were.
- metaphor is a figure of speech in which a comparison is implied.
- a simile is a figure of speech that compares one thing to another using like, or as, i.e., a heart as big as a whale.

3-6
5-6
6-8
4-8
6-8
7-8
6-8
4-6
7-8
6-8

The student is able to:

- identify a variety of forms in poetry:
 - cinquain, haiku, tonka
 - free verse, blank verse
- identify rhyme scheme in a variety of poetic forms:
 - couplet, quatrain, limerick, triplet
 - lyric, ballad, sonnet
- identify words and phrases that appeal to the senses (imagery).
- identify direct comparisons (metaphor).
- identify comparisons involving like or as (simile).
- identify symbolism as found in poetry.
- interpret the author's tone and theme.

5-8
7-8
4-7
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7-8
7-8
6-8
7-8

The student values:

- the variety of unique ways in which language is used in poetry.
- enjoyment obtained through poetry.
- his/her own response to poetry.
- the response of others to poetry.
- poetry as a natural expression.

4-8
4-8
4-8
4-8
4-8

SMALL SCHOOLS PROJECT

MATHEMATICS PROGRAM GOALS (K-12)

1. The student values the study of mathematics for its usefulness 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; measurement; 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

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SCOPE (K-8)

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SMALL SCHOOLS PROJECT

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Counting (Serial, Objects), Order

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K 1 2 3 4

The student knows:

The student is able to:

- count to 10.
- count to 100.
- * count objects to 10
- * count objects to 50.
- count objects by 2's to 100.
- count objects by 5's to 100.
- * count objects by 10's to 100.
- identify the position of objects first through tenth.
- name the number before, after or between any number to 10.
- * name the number before, after or between any number to 100.
- name the number before, after or between any number to 1,000.

K
1-2
K
1
1-2
1-2
1-2
K-1
K-1
1-2
2-3

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Equality and Inequality

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K 1 2 3 4

The student knows:

- the symbol "=" means "equal to."
- the symbol ">" means "greater than."
- the symbol "<" means "less than."

1-3
1-3
1-3

The student is able to:

- use one-to-one matching with sets of objects less than 10.
- compare sets of objects for equality and inequality using the words: "more than," "less than," and "equal to."
- compare the sets of objects by the use of symbols ">," "<," "=".
- compare numbers to 100 by the use of symbols ">," "<," "=".
- compare numbers to 999 by the use of symbols ">," "<," "=".
- compare numerical expressions by the use of the symbols ">," "<," "=" i.e.,

K-1
K-1
1
1-2
2-3
2-3

$3 + 2 \square 4 + 1$

$10 + 4 \square 14 - 3$

$1 + 6 \square 10 - 1$

The student values:

Mathematics

SUBJECT:

SPECIFIC AREA: Whole Numbers: Equality and Inequality

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The student knows:

- the symbol " $=$ " means "equal to."
- the symbol " $>$ " means "greater than."
- the symbol " $<$ " means "less than."
- the symbol " \neq " means "not equal to."

4-6
4-6
4-6
4-6

The student is able to:

- compare numbers to 100,000 by use of symbols " $<$," " $>$," " $=$," " \neq ."
- compare numbers to 1,000,000 by use of the symbols " $<$," " $>$," " $=$," " \neq ."

4-5
5-6

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Reading and Writing Numerals

Page
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The student knows

The student is able to:

- read the numerals to 10.
- * • read the numerals to 100.
- read any of the numerals to 999.
- * • read any of the numerals to 9,999.
- write the numerals to 10.
- write the numerals to 100.
- write any of the numerals to 999.
- read and write the number words to 10.
- read the critical number words, i.e., ones, tens, hundreds, ten, twenty, thirty, etc.
- write the numerals by two's to 100.
- write the numerals by five's to 100.
- * • write the numerals by ten's to 100.

The student values:
the ability to read and write numerals as a useful skill in daily living.

	K	1	2	3	4
The student knows					
The student is able to:	K 1-2 2-3 3-4 K 1-2 2-3 1-2 2-4 1-2 1-2 1-2				
The student values:	K-3				



SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Reading and Writing Numerals

Page
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The student knows:

- the equivalents for the major Roman numerals (I=1, V=5, X=10).
- the equivalents for the major Roman numerals (X=10, L=50, C=100, D=500, M=1,000).

4-5
5-6

The student is able to:

- read any of the numerals to a hundred thousand.
- * read any of the numerals to a million.
- read any of the numerals to a billion.
- read any of the critical number words (thousands, hundred thousands, millions, billions).
- write any of the numerals to a hundred thousand.
- * write any of the numerals to a million.
- write any of the numerals to a billion.
- * read and write Roman numerals I-X.
- read and write the major Roman numerals X, L, C, D, M.

4-5
5-6
5-6
4-6
4-5
5-6
5-6
4-5
5-6

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Place Value

Page
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Grade Placement
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Placement

The student knows:

- the place value of ones and tens in base numeration.
- the place value of hundreds in base ten numeration is the third numeral from the right.
- the place value of thousands in base ten numeration is the fourth numeral from the right.

1-2
2-3
3-4

The student is able to:

- write the expanded form of any two-digit number, i.e., $34 = \text{three tens} + \text{four ones}$.
- write the corresponding numeral from any two-digit number written in expanded form, i.e., three tens + four ones = 34.
- write the expanded form of any three-digit number, i.e., $342 = \text{three hundreds} + \text{four tens} + \text{two ones}$.
- write the corresponding numeral from any three-digit number written in expanded form, i.e., three hundreds + four tens + two ones = 342.
- write the expanded form of any four-digit number, i.e., $4,322 = \text{four thousands} + \text{three hundreds} + \text{two tens} + \text{two ones}$.
- write the corresponding numeral from any four-digit number written in expanded form, i.e., four thousands + three hundreds + two tens + two ones = 4,322.
- round numbers to the nearest ten and hundred.

1-2
1-2
2-3
2-3
3-4
3-4
3-4

Student values:

(This section contains faint, illegible handwriting and is mostly obscured by noise and artifacts.)

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Suggested
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Placement

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Place Value

4 5 6 7 8

The student knows:

- the place value of ten thousands in base ten numeration is the fifth numeral from the right.
- the place value of hundred thousands in base ten numeration is the sixth numeral from the right.
- the place value of millions in base ten numeration is the seventh numeral from the right.
- the place value of billions in base ten numeration is the tenth numeral from the right.

4-5
4-5
5-6
5-6

The student is able to:

- * write the expanded form of any five-digit number, e.g., 12,362 = twelve thousands + three hundreds + sixty tens + two ones.
- * write the expanded form of any six-digit number, e.g., 126,422 = one hundred twenty-six thousands + four hundreds + two tens + two ones.
- * write the expanded form of any seven-digit number, e.g., 1,222,621 = one million + two hundred twenty-two thousands + six hundreds + two tens and one.
- write the expanded form of any ten-digit number, e.g., 4,333,222,231 = four billions + three hundred thirty-three millions + two hundred twenty-two thousands + two hundreds + three tens and one.
- * round numbers to the nearest ten, hundred, thousand, million, billion.

4-5
4-5
5-6
5-6
4-6

The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Addition

Page
Suggested
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Placement

K 1 2 3 4

The student knows:

- . addition is the combining of numbers.
- . an addend is one of a set of numbers to be added. $4 + 2 + 3 = 9$
- . a sum is the total of all addends.
- . that adding zero to a number does not affect the sum.
- . the addition facts with sums to nine. (master)
- *. the addition facts with sums to 18. (master)
- . that the order in which two numbers are added does not change their sum (commutative property), i.e., $3+5=8$ or $5+3=8$.
- . when adding three or more numbers the way addends are grouped does not affect the sum (associative property), i.e., $(1+2)+4 = 1+(2+4)$.

K-1
1-3
1-3
1-2
1-2
2-3
2-3
1-3

The student is able to:

- *. add two two-digit numbers without renaming (carrying), i.e., $21 + 32 = 53$.
- . add three or more one-digit numbers.
- . add two three-digit numbers without renaming (carrying), i.e., $123 + 234 = 357$.
- . add three or more two-digit numbers with a sum of less than 100 without renaming (carrying), i.e., $21+23+14 = 58$.
- *. add any numbers with two or more digits that require renaming (carrying), i.e., $26+48 = 74$.
- . add any three or more two-digit numbers, i.e., $39+65+87+88 = 279$.
- . add any two or more three-digit numbers with renaming.
- *. add any two or more four-digit numbers with renaming.

1-2
1-2
2
2-3
2-3
3-4
3-4
3-4

The student values:



SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Addition

Page
Suggested
Grade Placement
District
Placement

The student knows:

- and maintains knowledges, skills and basic facts of addition taught in primary grades (see Mathematics, Addition #3)

4-8

The student is able to:

- complete any addition problems in either horizontal or vertical form.
- estimate sums using the concepts of "greater than" and "less than" ($140 + 90 > 200$ or < 250).

5-6

5-6

The student values:

- the quick and accurate recall of basic facts.

4-8

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers! Subtraction

Page
Suggested
Grade Placement
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Placement

The student knows:

- that subtraction is the inverse of addition.
- that subtracting zero from a number does not affect the sum.
- the difference is the result of subtracting one quantity from another, i.e., $5 - 3 = 2$
- the minuend is the quantity from which another quantity is to be subtracted, i.e., $6 - 3 = 3$
- the subtrahend is the quantity to be subtracted from another, i.e., $4 - 1 = 3$
- the subtraction facts with a minuend of five or less. (mastery)
- the subtraction facts with a minuend of nine or less. (mastery)
- * the subtraction facts with a minuend of 18 or less. (mastery)

	K	1	2	3	4
1-3					
1					
1-2					
1-2					
1-2					
1-2					
2					
2-3					

The student is able to:

- subtract a one-digit number from a one or two-digit number without renaming (borrowing), i.e., $8 - 2 = 6$, $25 - 2 = 23$.
- * subtract a two-digit number from a two-digit number without renaming (borrowing), i.e., $48 - 26 = 22$.
- subtract a one-digit number from a two-digit number requiring renaming (borrowing), i.e., $17 - 8 = 9$.
- * subtract a two-digit number from a two-digit number requiring renaming (borrowing), i.e., $37 - 28 = 9$.
- subtract a one-, two- or three-digit number from a three-digit number requiring renaming (borrowing), i.e., $463 - 7 = 456$, $463 - 27 = 436$ and $463 - 187 = 276$.

1-2
1-2
2-3
3
3

The student values:

100

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Subtraction

Page
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4 5 6 7 8

The student knows:

- and maintains knowledges, skills and basic facts of subtraction in primary grades (see Mathematics, Subtraction K-3)

4-8

The student is able to:

- * complete any subtraction problem in either horizontal or vertical form.
- check subtraction problems by addition.

4-6

4-6

The student values:

- the quick and accurate recall of basic subtraction facts.

4-8

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Multiplication

3 4 5 6 7

The student knows:

- that multiplication can be pictured as the combination of equal sets.
- 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 ($6 \times 0 = 0$).
- the product of any number multiplied by the factor of one is that number ($3 \times 1 = 3$).
- * the multiplication facts with products through 81 (mastery).

3
3
3
3
3-5

The student is able to:

- * multiply one, two and three digit numbers by a one digit number: $4 \times 5 = 20$ 22 222

$$\begin{array}{r} \times 5 \\ 110 \end{array} \quad \begin{array}{r} \times 5 \\ 1110 \end{array}$$

3-5

- * multiply any number by a two digit number: 126 14

$$\begin{array}{r} \times 15 \\ 630 \\ \underline{126} \\ 1,890 \end{array} \quad \begin{array}{r} \times 12 \\ 28 \\ \underline{14} \\ 268 \end{array}$$

4-5

- * multiply any number by any three digit number: 626

$$\begin{array}{r} \times 120 \\ 12520 \\ \underline{626} \\ 75,120 \end{array}$$

5-6

- estimate products using concepts of "greater than" and "less than."

4-6
4-6

- * multiply by products of 10 (10's, 100's, 1,000's).

The student values:

- the quick and accurate recall of facts.

3-8



SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Division

Page
Suggested
Grade Placement
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Placement

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.
- *. the basic division facts (mastery).

3-4
3-4
4
4
4
4-5
3-5

The student is able to:

- . divide a one or two digit number by a one digit number without remainders. $2 \overline{) 3}$
- *. divide a one or two digit number by a one digit number with remainder expressed as whole numbers. $2 \overline{) 5} R1$
- *. divide two, three and four digit numbers by one or two digit numbers with remainders expressed as whole numbers.
- *. divide two, three and four digit numbers by one or two digit numbers with remainders expressed as whole numbers.
- *. divide two, three and four digit numbers by one or two digit numbers with remainders expressed as a fraction. $18 \overline{) 419} \frac{5}{8}$
- . divide five digits or less by two or three digit numbers with or without remainders (expressed in whole numbers, fractions or decimals). $5 \overline{) 246}$
- *. solve any given division problem.
- . check a division problem by using multiplication.
- . estimate the quotient in a given division problem.

3-4
4-5
5-6
5-6
5-6
6-8
7-8
4-6
4-8

The student values:



SUBJECT: Mathematics

SPECIFIC AREA: Whole Numbers: Story Problems

Page
Suggested
Grade Placement
District
Placement

The student knows:

- characteristics of a number sentence are operational sign(s) and an equal sign.
- basic facts.
- that - and + are inverse operations.
- that X and ÷ are inverse operations.
- not all information given in a story problem may be relevant to the solution of the problem.
- clue words (total, sum, more, product, remainder, average, quotient).

2-8
3-5
3-4
4-5
2-8
3-5

The student is able to:

- develop (write) a story problem from a given number sentence.
- develop (write) a story problem from a given number sentence and solve the problem.
- project a mental image (draw a picture) of the problem from an appropriate story problem.
- identify operation to achieve solution (+, -, X, ÷).
- identify relevant information necessary for solution.
- estimate size of problem solution (><).
- translate word sentence into "number" sentence.
- translate equations to solvable form: $\square - 3 = 7$ to $\square = 7 + 3$.
- solve story problems with one operation.
- solve story problems with multiple operations.

2-8
4-8
2-8
4-6
2-8
4-8
4-6
5-8
2-4
4-8

The student values:

- analysis and solution of story problems as the ultimate goal of mathematics.

2-8

124

SUBJECT: Mathematics
 SPECIFIC AREA: Integers

Page
 Suggested Grade Placement
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The student knows:

- the set of integers is the set of whole numbers, their opposites and zero, i.e., ...-2, -1, 0, 1, 2...
- any integer is either positive, negative or zero.

	4	5	6	7	8
7-8					
7-8					

The student is able to:

- order integers. Example: $-3 < -4, 0 > -5, -7 < -3, -4 > -8$.
- find the opposite of an integer. Example: $6 -6, -3 +3$.
- find the position of an integer on the number line.
- read and write equations with positive and negative integers.
- * • add integers. Example: $(-6) + (-3) = -9$.
- subtract integers. Example: $(-7) - (-2) = -5$.
- * • multiply integers. Example: $(-2)(-3) = 6$.
- divide integers. Example: $20 \div (-2) = -10$.
- solve word problems requiring integers.
- solve one step ($X+3=2$) and two step ($3X+1=2$) open sentences involving integers.

7-8					
7-8					
7-8					
7-8					
7-8					
7-8					
7-8					
7-8					
7-8					
7-8					
7-8					

The student values:

105

SMALL SCHOOLS PROJECT

SUBJECT: Mathematics

SPECIFIC AREA: Rational Numbers: Fractions

Page
Suggested
Grade Placement
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Placement

The student knows:

- fractional regions of a model: halves.
- fractional regions of a model: halves, thirds, fourths.
- the fractional parts $1/2$, $1/4$, $1/3$, $2/3$, $2/4$, $3/4$ when given a set or grouping.
- a fraction having like denominator and numerator represents one.
Example: $2/2 = 1$

	K	1	2	3	4
K					
1-2					
2-3					
3					

The student is able to:

- * label models for halves, thirds, fourths.
- * use $>$ or $<$ and $=$ to compare fractional numbers with like denominators.
- * add fractions with like denominators: halves, thirds, fourths.
- subtract fractions with like denominators using shaded regions and number lines.

2					
3-4					
3-4					
3-4					

The student values:

100

SUBJECT: Mathematics

SPECIFIC AREA: Rational Numbers: Fractions

Page
Suggested
Grade Placement
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Placement

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.

5-7

5-7

5-7

5-7

5-7

4 5 6 7 8

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.
- order fractions with unlike denominators.
- locate a fractional number on a number line.
- * change fractions to simplest forms.
- change mixed forms to improper fractions.
- * 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.
- express addition and subtraction answers in simplest form.
- * multiply fractions (proper and improper) by fractions and/or by whole numbers.
- express fraction multiplication products in simplest forms.
- * divide fractions.
- divide mixed forms.
- express fraction division quotients in simplest form.

4-5

5-6

5-7

5-7

5-7

5-6

5-7

5-7

4-7

5-7

5-8

6-8

5-8

5-6

5-8

5-7

5-7

5-8

The student values:

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Mathematics

SPECIFIC AREA: Rational Numbers: Ratios, Percentage, Proportion

4 5 6 7 8

The student knows:

- a ratio is a way of comparing two numbers by division, i.e., the ratio of a to b is $\frac{a}{b}$.
- 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 %, i.e., 50% is $\frac{50}{100}$.
- the meaning of the key terms associated with percent: base, rate and percentage.
- base X rate = percentage.
- areas of application for percent: banking, commerce, statistics, communications.
- a proportion is a statement of equality between two ratios, i.e., $\frac{2}{4} = \frac{6}{12}$.
- in a proportion the cross-products are equal, i.e., for b and d $\neq 0$, $\frac{a}{b} = \frac{c}{d}$ implies $ad=bc$.

6-8
6-8
7-8
7-8
7-8
7-8
7-8

The student is able to:

- * rename any rational number as a percent, i.e., $.05 = 5\%$ -- $.5 = 50\%$ -- $\frac{3}{4} = 75\%$ -- $2 = 200\%$ -- $1\frac{1}{2} = 150\%$.
- * rename a number in percent form as either a fraction or decimal, i.e., $100\% = 1.00$
 $75\% = .75 = \frac{3}{4} \cdot \frac{75}{100}$
 $150\% = \frac{3}{2} \cdot \frac{150}{100} = 1\frac{1}{2} = 1.5$
 $33\frac{1}{3}\% = \frac{1}{3} = .333\dots$
- * solve the three types of percentage problems: $a\%$ of $b = c$, i.e.,
 - 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, i.e., $\frac{8}{X} = \frac{2}{7}$.
- * solve simple word problems involving percent: interest, commission, compound interest, % of change, discount, price.

7-8
7-8
7-8
7-8
7-8
7-8

133



Page
Suggested
Grade Placement
District
Placement

SUBJECT: Mathematics

SPECIFIC AREA: Rational Numbers: Decimals

4 5 6 7 8

The student knows:

The student is able to:

- * read and write decimals to the thousandths. 6-8
- * read and write decimals to hundred thousandths. 7-8
- express a decimal in expanded form to thousandths, i.e.,

$$.438 = \frac{4}{10} + \frac{3}{100} + \frac{8}{1000}$$
 6
- express a decimal in expanded form to hundred thousandths. 7-8
- express the expanded form of a fraction in decimal form, i.e.,

$$\frac{4}{10} + \frac{3}{100} + \frac{8}{1000} = .438$$
 6-8
- * order decimals on number line. 6-8
- * round decimals to hundredths, i.e., $.763 \rightarrow .76$ 6-7
- * round decimals to tenths. $.284 \rightarrow .3$ 6-7
- * round decimals to thousandths. 7-8
- round decimals to ten thousandths. 7-8
- * add and subtract decimals to thousandths. 6
- * add and subtract decimals to hundred thousandths. 7-8
- * multiply and divide decimals to thousandths. 7-8
- multiply and divide decimals to hundred thousandths. 7-8

The student values:

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Suggested
Grade Placement
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SUBJECT: Mathematics

SPECIFIC AREA: Real Numbers

4 5 6 7 8

The student knows:

there are rational and irrational numbers. Examples of rational numbers: $\frac{3}{5}$, $-\frac{2}{3}$, 7, 1.36, .3333

7-8

Examples of irrational numbers: π , $\sqrt{2}$, .2121121112...

The student is able to:

order real numbers using $< = >$ Example: $\sqrt{2} < 3$

7-8

.6 $<$.6812

order real numbers on the number line: $\leftarrow \frac{1}{2} \quad \sqrt{2} \quad \pi \rightarrow$
-2 -1 0 1 2 3

7-8

express common fractions as repeating decimals:

8

$$\frac{2}{3} \rightarrow 3\sqrt{2.00} \rightarrow .6$$

express repeating decimals as common fractions. $.150 = \frac{15}{100} = \frac{3}{20}$

8

$$\begin{array}{l} n = .\overline{33} \\ 10n = 3.\overline{33} \\ -1n = -.3\overline{3} \\ \hline 9n = 3.00 \end{array} \quad \begin{array}{l} n = .\overline{18} \\ 100n = 18.\overline{1818} \\ -1n = -.1\overline{818} \\ \hline 99n = 18.0000 \end{array}$$

$$n = \frac{3}{9} = \frac{1}{3} \quad n = \frac{18}{99} = \frac{2}{11}$$

distinguish between the representations of rational and irrational numbers. Example: rational 3, -6, .6

irrational: $\sqrt{5} = 2.236068...$ $\sqrt{2} = 1.414214...$

8

The student values:

110

SUBJECT: Mathematics

SPECIFIC AREA: Algebraic Expressions

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The student knows:

- . the term "variable" means a symbol (usually a letter from the alphabet in lower case) that represents a number(s).
- . the expression $5y$ means five times the value of y .
- . the expression $\frac{y}{5}$ means y divided by five.

7-8
7-8
7-8

The student is able to:

- * solve one step equations by using the addition principle.
 - * solve one step equations by using the multiplication principle.
 - * solve two step equations by using the addition and multiplication principles.
 - . evaluate numerical expressions by using the order of operations.
 - first: ()
 - second: \times , \div , left to right
 - third: $+$, $-$, left to right
- Example: $3 \cdot (4-2) + 8 = 3(2) + 8$
 $= 6 + 8$
 $= 14$

7-8
7-8
8
7-8

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Numeration: Number Theory

Page
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The student knows:

- whole numbers are either even or odd.
- a prime number is a number divisible by 1 and itself only.
- numbers that are divisible by a number other than 1 and itself are composite.
- a composite number can be expressed as the product of primes in only one way ($24=2 \cdot 2 \cdot 2 \cdot 3$).
- the greatest common factor (g.c.f.) of two or more numbers is the largest of the common divisors of the numbers.
- the least common multiple (l.c.m.) of two or more numbers is the smallest of the common multiples of the numbers.
- there are divisibility tests for 2, 3, 4, ..., 10 (except 7) and they can be used to help factor.

	4	5	6	7	8
4					
5-8					
6-8					
6-8					
6-8					
6-8					
6-8					

The student is able to:

- find the primes less than 100.
- do a prime factorization of a number.
- * find the g.c.f. of two or more numbers:
 $18 = 2 \cdot 3 \cdot 3$
 $24 = 2 \cdot 2 \cdot 2 \cdot 3$ g.c.f. = $2 \cdot 3 = 6$
- * find the l.c.m. of two or more numbers:
 $8 = 2 \cdot 2 \cdot 2$ l.c.m. = $2 \cdot 2 \cdot 2 \cdot 3 = 24$
 $6 = 2 \cdot 3$
- use divisibility tests for 2, 3 and 5 as an aid in finding the prime factorization.

	4	5	6	7	8
5-6					
6-8					
6-8					
6-8					
6-8					
6-8					

The student values:

- numbers as a natural phenomenon and not man-made.
- numerals as the symbols we use to represent numbers.

	4	5	6	7	8
4-8					
4-8					

Page
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SUBJECT: Mathematics

SPECIFIC AREA: Numeration: Scientific Notation -- Exponents

4 5 6 7 8

The student knows:

- exponential form is an expression of the form M^b .
- M^b means M as a factor b times ($5^4 = 5.5.5.5$).
- in M^b , M is the base and b is the exponent.
- expressing a number in scientific notation is writing it as a number between 1 and 10 multiplied by a power of 10, e.g., $251 = 2.51 \times 10^2$.
- M^{-b} means $\frac{1}{M^b}$ (the inverse M^b), i.e., $10^{-2} = \frac{1}{10^2}$.
- $M^x \cdot M^y = M^{x+y}$ ($3^2 \cdot 3^4 = 3^6$).
- $M^x \div M^y = M^{x-y}$ ($2^6 \div 2^4 = 2^2$).

6-8
6-8
6-8
7-8
8
8
8

The student is able to:

- evaluate an exponential expression, e.g. $2^3 = 2.2.2 = 8$.
- name a decimal number including negative exponents in scientific notation: $358 = 3.58 \times 10^2$
 $.00012 = 1.2 \times 10^{-4}$.
- name a number, including negative exponents in scientific notation in decimal form: $2.65 \times 10^3 = 2650$
 $6.5 \times 10^{-3} = .0065$

6-8
7-8
7-8

The student values:

- scientific notation as a simplified expression of very large or very small numbers.

6-8

113

SMALL SCHOOLS PROJECT

SUBJECT: Mathematics

SPECIFIC AREA: Geometry

Page
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K 1 2 3 4

The student knows:

- the positional terms, i.e., left, right, top, bottom, in front of, behind, below, next to, on, above, middle, between, inside and outside..
- the term "line segment" refers to part of a line and has two endpoints.
- a line segment is named by its endpoints.
- a pentagon is a closed shape with five sides.
- a hexagon is a closed shape with six sides.
- an octagon is a closed shape with eight sides.
- the radius is a line segment from the center of a circle to a point on the circle.
- the diameter is a line segment that goes from one side of a circle to another and passes through the center

K-1
2-3
2-3
3
3
3
3-4
3-4

The student is able to:

- *. identify geometric shapes: square, circle, triangle and rectangle.
- *. locate positions, i.e., left, right, top, bottom, in front of, behind, below, next to, on, above, middle, inside and outside.
- *. identify congruent shapes, i.e., circles, squares, rectangles, triangles.
- identify the left side and right side of objects.
- use a straightedge to draw line segments to form recognizable shapes: square, rectangle and triangle.
- name a line segment by its endpoints.
- identify an angle.
- put a radius or diameter on a circle.

K
K-1
K-1
K-1
2-3
2-3
2-3
3-4

The student values:

114



SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Shapes (Two-Dimensional)

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The student knows:

Two-dimensional

- . a rectangle has four right angles (square corners, perpendicular lines) and opposite sides are congruent.
- . a square is a special rectangle with four equal (congruent) sides.
- . a parallelogram is a four sided figure with opposite sides equal.
- . a rectangle is a parallelogram with four right angles, or four 90° angles.
- . a parallelogram is a quadrilateral with opposite sides equal and parallel.
- . a quadrilateral is a four-sided polygon.
- . a trapezoid is a quadrilateral with one pair of parallel sides.
- . a rhombus is a parallelogram with four congruent sides.
- . a congruence means a point-to-point fit.
- . a polygon is a closed figure made up of straight line segments.

4-6
4-6
4-6
6-8
6-8
7-8
7-8
8
7-8
7-8

The student is able to:

- * . identify two-dimensional figures: rectangle, parallelogram.
- . identify two-dimensional figures: quadrilateral, trapezoid, rhombus.
- . identify and name congruent, two-dimensional shapes.

4-5
5-8
5-7

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Shapes (Three-Dimensional)

Page
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The student knows:

Three-dimensional

- a die is a model of a cube.
- a ball is a model of a sphere.
- a can is a model of a cylinder.
- ~~the great pyramids of Egypt are models of a pyramid.~~
- a sugar cone and a funnel without a spout are models of a cone.
- a triangular prism is a three-dimensional figure with bases which are congruent triangles in parallel planes and lateral faces which are parallelograms.
- a rectangular prism is a three-dimensional figure with bases which are congruent rectangles in parallel planes and lateral faces which are parallelograms.

4-6
4-6
4-6
4-6
4-6
7-8
7-8

The student is able to:

- identify three-dimensional figures: cube, sphere, pyramid, cone.
- identify three-dimensional figures: cylinder, triangular prism, rectangular prism.

4-5
6-7

The student values:

116

SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Points, Lines, Line Segments

Page
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4 5 6 7 8

The student knows:

- . a point is an exact location in space.
- . a line segment is part of a line and has two end points.
- . a straight line is a set of infinite points on a plane having no end points.
- . intersecting lines are lines in the same plane that cross each other.
- . parallel lines are lines in the same plane which do not intersect.
- . perpendicular lines are two intersecting lines that form right angles.
- . a ray is a set of infinite points on a plane with one end point.
- . a plane is a set of points that can be connected with a line.

4-8
4-8
4-8
5-7
5-7
5-7
5-8
4-8

The student is able to:

- * . identify a point, a line, and a line segment.
- . identify a ray.
- . measure a line segment.
- * . identify the following types of lines: intersecting, parallel, perpendicular.
- . bisect a line segment.
- . construct parallel and perpendicular lines.

4-5
5-7
4-6
5-7
7-8
7-8

The student values:

117

SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Angles, Triangles

Page
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4 5 6 7 8

The student knows:

Angles

- . an angle is the union of two rays with a common end point. 6-8
- . a right angle is 90° . 5-8
- . an acute angle is less than 90° . 5-8
- . an obtuse angle is more than 90° . 5-8
- . supplementary angles are two angles whose sum equals 180° . 5-8
- . complementary angles are two angles whose sum equals 90° . 5-8

Triangles

- . a triangle is a polygon with three sides. 7-8
- . a triangle is a figure with three sides. 5-6
- . a right triangle has one right angle. 5-8
- . an acute triangle has three acute angles. 5-8
- . an obtuse triangle has one obtuse angle. 5-8
- . an equilateral triangle has three congruent sides. 5-8
- . an isosceles triangle has two congruent sides. 5-8
- . a scalene triangle has no congruent sides. 5-8

The student is able to:

- * . identify congruent angles. 7-8
- . measure angles to the nearest degree: right, obtuse, acute. 7-8
- * . identify triangles (by angles) right triangle, acute triangle, obtuse triangle. 5-8
- . identify triangles (by sides) isosceles triangle, scalene triangle, equilateral triangle. 5-8
- . bisect any angle. 8+
- . identify equal angles. 6

The student values:

113

SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Circles

Page
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The student knows:

- . a circle is the set of all points in the same plane equal distance from a given point.
- . the circumference of a circle is the same as the perimeter of a circle.
- . a cord is a straight line within a circle whose end points touch the circumference.
- . the diameter of a circle is a line segment going through the center of a circle whose end points touch the circumference.
- . the radius is a line segment within a circle, one end point at the center and the other end point on the circumference.
- . an arc is a portion of the circumference of a circle.

4-6
6-8
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4-6
4-6
6-8

The student is able to:

- * locate properties of a circle: diameter, radius, center.
- * locate properties of a circle: cord, arc, semi-circle.
- * construct a circle from a given radius or diameter.

4-6
6-8
6-8

The student values:

113

Page
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SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Perimeter

4 5 6 7 8

The student knows:

- the perimeter of polygons is determined by adding together the lengths of all sides.
- the circumference of a circle is found by multiplying the diameter times pi ($C = \pi d$ or $C = 2\pi r$).
- a polygon is a closed figure made up of straight line segments.
- pi is the relationship between the circumference and the diameter of a circle, or approximately 3.1416.

4-6

7-8

7-8

7-8

The student is able to:

- * determine the perimeter of polygons.
- determine the circumference of a circle, given the diameter or radius.
- determine the diameter or radius given the circumference.
- determine the missing sides of a polygon, given the other sides and the perimeter.

4-8

7-8

7-8

7-8

The student values:

120

SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Area: rectangles, triangles, circles

Page
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The student knows:

- . area is measured in square units.
- . a square unit is represented by unit² (cm², dm²).
- . the area of a rectangle is determined by multiplying the length times width ($A=lw$).
- . the area of a triangle is determined by multiplying one half the base times the height ($A = 1/2 bh$).
- . the area of a circle is determined by multiplying pi times radius squared ($A = \pi r^2$).

6-8
6-8
6-8
6-8
7-8

The student is able to:

- * . compute the area of a rectangle given the length and width.
- . compute either the length or width of a rectangle given the area and one dimension.
- * . compute the area of a triangle given the base and height.
- . compute the height or base given the area and one dimension.
- * . compute the area of a circle given either the diameter or radius.
- . compute the radius or diameter of a circle given the area.

6-8.
7-8
6-8
7-8
7-8
7-8

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Geometry: Volume

Page
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The student knows:

- the volume of a rectangular prism is determined by multiplying the length times height times width ($V=lhw$).
- the volume of a cube is determined by multiplying side (edge) times side times side ($V=s \cdot s \cdot s$).
- the volume of a cylinder is determined by multiplying pi (π) times radius squared times height ($V=\pi r^2 h$).
- a cubic unit shall be represented by unit³ (cm^3, m^3, dm^3).

7-8

7-8

7-8

7-8

The student is able to:

- * determine the volume of a rectangular prism given the length, height and width.
- determine the length, height or width of a rectangular prism given the volume and two of the three dimensions.
- * determine the volume of a cube given the length of one side.
- determine the length of a cube side given the volume.
- * determine the volume of a cylinder given the radius (or diameter) and height.
- determine the radius, diameter or height of a cylinder given the volume and one dimension.

7-8

7-8

7-8

7-8

7-8

7-8

The student values:

122

SUBJECT: Mathematics

SPECIFIC AREA: Graphs

Page
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The student knows:

- a picture graph (pictograph) is a visual representation of a set of data where each picture represents an object.
 - a. graphs which deal with whole numbers.
 - b. graphs where picture represents other than whole numbers.
- a bar graph is a visual representation of a set of data where one unit may represent .1, 2, 5 or 10 items.
- a line graph represents data by specific points on a grid, the points being joined by lines to form a visual representation (or pattern).
- an ordered pair of numbers identifies a point on a grid.
- a double bar graph compares two sets of data.
- a circle graph shows information in terms of percentage of a fraction of the whole.
- a table is a collection of data displayed in a specific order according to its variables.
- a vertical axis is the vertical line along which a coordinate is measured.
- a horizontal axis is the horizontal line along which a coordinate is measured.
- coordinates are sets of numbers used to locate a point in space. (4, 3), (2, 1).

K-1
K-3
4-6
2-3
2-4
5-6
5-6
6-7
5-8
5-6
5-6
5-6

The student is able to:

- read and construct a picture graph (pictograph) from given and/or collected data (whole numbers).
- read and construct a picture graph (pictograph) from given and/or collected data (whole numbers and fractional parts).
- collect data.
- order or rank collected data in the form of a table.
- plot data from tables.
- * • read and interpret data on a simple bar graph.
- * • read and interpret data on a multiple bar graph.
- * • construct a bar graph from given data or from collected data.
- construct a multiple bar graph from given data or from collected data.
- * • construct a single line graph from given data or from collected data.
- construct a multiple line graph from given data or from collected data.
- read and interpret data on a circle graph.
- construct a circle graph from given data or collected data.

K-3
4-6
2-4
5-8
5-8
2-4
5-7
3-4
5-6
4-5
6-8
6-7
6-7

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Probability and Statistics

Page
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The student knows:

- . that probability is expressed in ratios which is a comparison.
- . the probability of an event can be expressed as a fraction (common) or a per cent.
- . the probability is the number of desired outcomes compared to the number of possible outcomes. Example: the probability of heads up if a coin is flipped. Number desired: 1 (heads) Number possible: 2 (heads or tails). Probability is 1/2 or 50%.
- . the average (mean) of a set of scores is found by dividing the sum of the scores by the number of scores.
- . the median of a set of scores is the middle score when the scores are in numerical order.

6-8

6-8

6-8

4-8

6-8

The student is able to:

- * . find the average of a set of scores.
- * . find the mean of a set of scores.
- * . find the median of a set of scores.
- . find the probability of an event.

4-6

7-8

6-8

6-8

The student values:

124

SMALL SCHOOLS PROJECT

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Time

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K 1 2 3 4

The student knows:

- . the names of the days of the week.
- . the names of the months.
- . the names of the months in sequence.
- . the short hand of the clock is the hour hand.
- . the long hand of the clock is the minute hand.
- . the term "minute" refers to a unit of time measurement.
- . the term "hour" refers to a unit of time equal to 60 minutes.

K-1
1-2
1-2
2
2
2
2

The student is able to:

- *. tell time to the hour.
- *. tell time to the half hour.
- *. tell time to the quarter hour.
- *. tell time by 5-minute intervals.
- *. write time in notation, i.e., 12:00, 12:30, 12:15, 12:55.

1-2
1-2
2-3
3-4
1-4

The student values:

- . estimation as a useful skill in time measurement.

K-3

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Time

Page
Suggested
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4 5 6 7 8

The student knows:

- the basic units of time covered in K-3; hour (60 minutes), half-hour (30 minutes), quarter hour (15 minutes), five minute interval.

4

The student is able to:

- * tell time in five minute intervals.
- * tell time in minutes from both clock face and digital.
- * use p.m. and a.m. notation in writing times.
- * convert a unit of time to another unit (hours, minutes, seconds, days, weeks, months, years).
- compute time intervals between two times.
- read time charts.
- solve work problems.

4
4
4
4-8
4-8
4-8
4-8

The student values:

133

SMALL SCHOOLS PROJECT

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Money

Page
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K, 1 2 3 4

The student knows:

- . the term "penny," "nickel," and "dime" are monetary units.
- . that five pennies have the same value as one nickel.
- . that 10 pennies have the same value as one dime or two nickels.
- . the equivalent change of coins equal to or less than 10 cents.
- . 25 pennies have the same value as a quarter.
- . a quarter is one-fourth of a dollar.
- . the combination of coins which have the same value as a quarter.
- . the combination of coins which have the same value as one dollar.

1
1
1
1
2-3
2-3
2-3
2-3

The student is able to:

- * . combine coins equal to or less than 10 cents.
- * . combine coins that have the same value as a quarter.
- * . combine coins that have the same value as a dollar.

1
2-3
2-3

The student values:

- . estimation as a useful skill in money measurement.

2-3

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Money

Page

Suggested
Grade Placement

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Placement

The student knows:

- the basic units of money covered in K-3; penny, nickel, dime and quarter, half-dollar, dollar.

4-8

The student is able to:

- write the value of money equal to or less than \$1,000.00.
- count change totaling less than \$20.00, beginning with a certain value.
- determine if the amount of change received from a purchase is correct.
- make purchase and change from \$100.00 or less.
- add and subtract two money values using dollar and cents notation.
- solve money problems using money by use of multiplication or division.
- multiply or divide a given amount of money.
- estimate money to the nearest dollar.

4-8

4-5

4-8

6-8

4-5

5-8

5-8

4-8

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Linear

Page
Suggested
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K 1 2 3 4

The student knows:

- the term "centimeter" refers to a metric unit of linear measurement.
- the term "inch" refers to an English unit of linear measurement.
- the term "meter" refers to a metric unit of linear measurement equal to 100 centimeters or 10 decimeters.
- the term "foot" refers to a unit of linear measurement equal to 12 inches.
- the term "yard" refers to a unit of linear measurement equal to 3 feet or 36 inches.
- the term "half-inch" is a unit of linear measurement.
- the term "quarter-inch" is a unit of linear measurement.
- two quarter inches equal one half-inch.
- four quarter inches equal one inch.
- four quarter inches equal two half-inches.
- the term "kilometer" is a metric unit of linear measurement.
- the term "perimeter" refers to the linear measurement around a given space. (geometry)
- the term mile is an English unit of linear measurement used to indicate distance.

1
1
2
2
2
3
3
3-4
3-4
3-4
3-4
3-4
3-4

The student is able to:

- * compare size using the following terms: longer, smaller, largest, smallest, taller, tallest, longest, shortest, same.
- * measure an object(s) using centimeters.
- * measure the length of an object(s) using inches.
- * measure length using a meter stick.
- * measure length using a foot ruler.
- * measure length using a yardstick.
- * estimate lengths.
- measure a specific length to the nearest half-inch.
- measure a specific length to the nearest quarter-inch.
- measure the perimeter of a simple geometric figure.
- compute distance in miles.

K-1
1
1
2
2
2
2-3
3-4
3-4
3-4
3-4

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Metric Linear

Page
Suggested
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4 5 6 7 8

The student knows:

- * . the abbreviation for the commonly used metric units of lengths: mm - millimeter, cm - centimeter, m - meter, km - kilometer. 4-6
- . the less commonly used metric units of lengths: dm - decimeter, dam - decameter, hm - hectometer. 4-6
- . the prefix meaning: milli--1/1000, centi--1/100, deci--1/10, deca--10, hecto--100, kilo--1000. 4-6
- . meter may also be spelled metre. 4-6
- . the term millimeter refers to 1/10 of a centimeter and 1/1000 of a meter. 4-6
- . the term centimeter refers to 1/100 meter and 10 millimeters. 4-6
- . the term decameter refers to 10 meters. 4-6
- . the term hectometer refers to 100 meters. 4-6

The student is able to:

- . identify the unit of measurement most appropriate for a given task. 4-5
- * . measure a specific length to the nearest mm, cm, m. 4-6
- . estimate to within $\pm 20\%$ lengths of familiar objects in mm, cm, and m. 4-6
- . use the meter stick to measure the nearest mm, cm. 4-6
- . convert from one linear measurement to another linear measurement within the metric system. 5-6
- . to distinguish which units are more precise. 6-8
- . round to the least precise measurement for computational purposes. 6-8

The student values:

130

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Capacity (Volume)

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K 1 2 3 4

The student knows:

- the term "liter" refers to a metric unit of volume measurement.
- the terms "cup," "pint," "quart" and "gallon" refer to units of capacity measurement.
- two cups equal one pint.
- four cups or two pints equal one quart.

1-3
1-3
1-4
1-4

The student is able to:

- measure capacity using the liter as the unit of measurement.
- measure capacity using a "cup," "pint," "quart" or "gallon" as the unit of measure.

1-3
1-3

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Metric Capacity

Page
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The student knows:

- * . the abbreviation of the commonly used metric units of capacity (volume): ml - millimeter, l - liter. 4-6
- . the abbreviation for the less commonly used metric units of capacity: cl - centiliter, dl - deciliter, dal - decaliter, hl - hectoliter. 4-6
- . the prefix meanings: milli---1/1000, centi---1/100, deci---1/10, deca---10, hecto---100, kilo---1000. 4-6
- . liter may also be spelled litre. 4-6
- . the term millimeter refers to 1/1000 of a liter. 4-6

The student is able to:

- . use the graduated cylinder to measure to the nearest ml and l. 4-6
 - * . use l and ml to measure liquids. 4-6
 - . estimate capacity to within $\pm 20\%$ of the capacity. 4-6
 - . convert from one measurement to another measurement within the metric system. 5-6
 - . distinguish which units are more precise. 6-8
- NOTE: for cubic measurement of volume see GEOMETRY.

The student values:

132

SMALL SCHOOLS PROJECT

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Weight

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District
Placement

The student knows:

- . the term "kilogram" refers to a metric unit of weight.
- . the term "gram" refers to a metric unit of weight.
- . the term "pound" refers to a unit of weight.

2-3
2-3
2-3

The student is able to:

- . weigh objects to the nearest kilogram.
- . weigh objects to the nearest gram.
- * . weigh objects, to the nearest pound.

2-3
2-3
2-3

The student values:

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Metric Weight

The student knows:

- *. the abbreviation for the commonly used metric units of weight: mg - milligram, g - gram, kg - kilogram. 4-6
- *. the less commonly used metric units of weight: cg - centigram. dg - decigram, dag - decagram, hg - hectogram. 4-6
- . the prefix meanings: milli--1/1000, centi--1/100, deca--10, hecto--100, kilo--1000. 4-6
- . the term "gram" refers to weight. 4-6
- . the term "kilogram" refers to 1000 grams. 4-6
- . the term "milligram" refers to .001 grams. 4-6
- . the term "metric tonne" refers to 1000 kilograms. 6-8
- . the difference between mass and weight. 8

The student is able to:

- . identify the unit of measurement most appropriate for weighing a given object. 4-5
- *. measure the weight of an object to the nearest gram. 4-6
- . estimate within $\pm 20\%$ the weight of a familiar object. 4-6
- . use a balance scale to weight objects. 4-6
- . convert from one unit of weight to another unit of weight within the metric system. 5-6
- . distinguish which units of weight are more precise. 6-8

The student values:

134



SUBJECT: Mathematics

SPECIFIC AREA: Measurement: Metric Temperature

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . degree Celsius is used to measure temperature.
- * . Celsius and Centigrade are the same.
- . the abbreviation for Celsius is C.
- * . common temperature references: 0° is freezing point of water, 37°C is normal body temperature, 100° is boiling point of water.

3-4

3-4

3-4

3-4

The student is able to:

- * . read a thermometer.
- * . calculate differences in degrees.

4-8

4-8

The student values:

SUBJECT: Mathematics

SPECIFIC AREA: Measurement: English

Page
Suggested
Grade Placement
District
Placement

The student knows:

- * the basic units of the English system of linear measurement and their abbreviations: in.—inch, ft.—foot(feet), yd.—yard, mi.—mile.
- * the basic units of the English system of volume and their abbreviations: c.—cup, pt.—pint, qt.—quart, gal.—gallon.
- the basic units of the English system of weight and their abbreviations: oz.—ounce, lb., pound, t.—ton.
- the basic unit of temperature is Fahrenheit and the common reference freezing of water is 32° , body temperature is 98° and boiling water is 212° .

4

4

4

4-6

The student is able to:

- maintain the skills learned in grades K-3.

4-8

The student values:

136

SMALL SCHOOLS PROJECT

SOCIAL STUDIES PROGRAM GOALS

1. The student develops basic understandings about human relationships: person to person, person to group, group to group, person to institution, group to institution and institution to institution contacts and dealings.
2. The student develops an understanding of the ways in which beliefs, values and behavior patterns develop and how they are interrelated in a variety of settings and situations ranging from small groups such as the family to very large entities such as nations and a variety of associations of nations.
3. The student understands basic problems and conflicting values in human relationships and develops skills that would enable him/her to deal with problems and values rationally.
4. The student develops a curiosity for social phenomena as well as the appropriate skills to seek information and use it to explain and influence these phenomena.
5. The student understands how events of the past have influenced the shape of today's forms of human relationships and learns to use past experiences as a viable method to attempt to solve current societal problems.
6. The student develops a basic commitment to the dignity of the individual and the democratic process and demonstrates respect for law and the rights of all individuals as well as one's fulfillment of civic responsibility.
7. The student increases his/her knowledge of academic and social skills which enables him/her to develop a positive self-concept and facilitates the growth of social identity.

SMALL SCHOOLS PROJECT

SOCIAL STUDIES
SCOPE (K-3)

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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Myself

Page
Suggested
Grade Placement
District
Placement

The student knows:

- personal identifying information about self.
- he/she is like other human beings and also unique.
- that as a unique individual, he/she has certain likes and dislikes.
- he/she will grow and physically change during Kindergarten.
- that behavior and feelings often have a cause and effect relationship.
- he/she is responsible for his/her behavior.

	K	1	2	3	4
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The student is able to:

- identify characteristics about self that are unique.
- cope with various changes that occur in routine.
- identify the feelings of love, loneliness, happiness, sadness, anger, frustration.
- express emotional feelings of love, loneliness, happiness, sadness, anger, frustration.
- accept mistakes he/she makes.

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The student values:

- choices and own likes and dislikes as a reflection of individuality, uniqueness and contribution to self.

K					
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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Me and My Family

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . that each member of the family has responsibilities in his/her home.
- . the ways in which family members help him/her.
- . the ways in which he/she helps his/her family.

K
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K

The student is able to:

- . identify activities that members of his/her family share.
- . compare his/her home with homes of other members in the class.

K
K

The student values:

- . his/her contribution to other family members.
- . the various holidays and activities his/her family shares.

K
K

SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Me and My Friends

Page
Suggested
Grade Placement
District
Placement

The student knows:

- and recognizes the individuality of others.

K

The student is able to:

- describe distinguishing characteristics of his/her friends.

K

The student values:

- the likenesses and differences of friends through their relationships.
- the friendships of others.

K
K

SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Me and My School

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the physical layout of the schools and classroom.
- how the school and home are alike and different.
- the various school rules.
- it takes many people doing various jobs to maintain the school.
- that there are various jobs that are necessary to maintain the classroom.
- that school is a place for learning and acquiring new skills and abilities.

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K 1 2 3 4

The student is able to:

- demonstrate acceptance of school rules.
- identify the jobs and tools of school personnel.
- assume responsibility for classroom jobs.
- take individual responsibility for accomplishing new tasks.
- work independently.
- share and cooperate with members in the classroom.

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The student values:

- the importance of school rules.
- the roles of school personnel.
- his/her role as a learner in the school.
- the importance of sharing and cooperating in the classroom.
- the free time that provides opportunities to work together and share.

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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Me and My Environment

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . that his/her community is unique and different from other communities.
- . the physical layout of his/her community.
- . where to go in his/her community for leisure time activities.
- . there are ways he/she can beautify his/her community and keep it clean.
- . some of the safety rules in the community.

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K 1 2 3 4

The student is able to:

- . name his/her community.
- . identify the workers in his/her community who help him/her.

K
K

The student values:

- . the uniqueness of his/her community.
- . the safety rules of the community.

K
K

SUBJECT: Social Studies

SPECIFIC AREA: Families: Composition

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the family is the basic group in all societies.
- family patterns vary between and within societies.
- families undergo changes (loss or addition of members, divorce, marriage).
- relatives are part of a family.

K 1 2 3 4

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The student is able to:

- give reasons for change in family composition.
- identify changes within his/her or other families.
- predict changes that would occur in a given situation.

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The student values:

- the family as an institution.
- and respects older members of his/her family as a source of knowledge (aunts, uncles, grandparents).

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Page
Suggested
Grade Placement
District
Placement

SUBJECT: Social Studies

SPECIFIC AREA: Families: Rules and Responsibilities

The student knows:

- . each family member has responsibility to the family's well-being.
- . responsibility may be determined by strengths, skill, ability and desires.
- . that the family, like any other group, must have rules.
- . rules differ from family to family according to each family's needs and values.
- . that family rules may be changed.

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The student is able to:

- . give reasons why families have rules.
- . name some family rules; who made them; why.
- . name tasks associated with each family member.
- . discuss value differences that arise in daily life.

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The student values:

- . each member's contribution to the family's well-being.
- . his/her own contribution to the family's well-being.
- . the need for rules wherever people live or work together.

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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Families: Basic Needs--Food

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . food is a universal need.
- . most food is grown or raised on farms and can be obtained in a variety of ways (buying, growing, etc.)
- . a family's buying power influences the type and amount of food purchased.
- . environment affects type of food produced in an area.
- . some families do not have enough food.
- . many people are involved in food production.

	K	1	2	3	4

The student is able to:

- . tell why food is a basic need.
- . name some foods produced in his/her area.
- . identify foods that come from other areas.
- . name some of the workers involved in supplying food needs.
- . give reasons why food should not be wasted.

The student values:

- . the role of the farmer for providing food for the people.
- . food and is not wasteful.



SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Families: Basic Needs--Shelter

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . shelter is a universal need.
- . environment is a determining factor in choice of shelters and material used for shelters.
- . life style, values, economic conditions determine a family's shelter.
- . shelter is a place which provides protection and privacy.

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The student is able to:

- . name different materials that can be used for building shelters.
- . state reasons for needing shelter.
- . give examples of different types of shelters (apartment, mobile, A-frame, igloo, etc.).

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The student values:

- . shelter for protection and privacy.
- . and respects other people's shelter and privacy.

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SUBJECT: Social Studies

SPECIFIC AREA: Families: Basic Needs--Clothing

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . clothing is a universal need.
- . different types of clothing have different purposes.
- . environment affects type of clothing worn.
- . clothing is made from a variety of materials (animals, plants, man-made).
- . clothing style is determined by individual and group values.
- . clothing can be hand or factory made.
- . families may spend a large portion of their income for clothes.

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The student is able to:

- . list clothes suitable for a certain environment or occasion (hot weather, cold, recreational vs. formal).
- . name sources of types of clothing (animal, plant, man-made).

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The student values:

- . taking care of his/her clothes.

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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Families: Basic Needs--Love

Page
Suggested
Grade Placement
District
Placement

The student knows:

- humans need to give and receive love.
- there are many ways to show love.
- the family helps meet a person's need for love.

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The student is able to:

- identify people or other living things he/she loves.
- name ways in which he/she shows love.
- name ways in which his/her family members provide love for each other.

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The student values:

- giving and receiving love by sharing in family activities and responsibilities.

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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Families: Basic Needs--Recreation

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . that people everywhere need some form of recreation.
- . that recreational activities are available in immediate surroundings.
- . that recreation can take a variety of forms (group--individual; sport--hobby).

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The student is able to:

- . name a variety of sports and hobbies which he/she can appreciate and enjoy throughout life.
- . identify recreational activities which cost money and activities which are free.

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The student values:

- . enjoyment derived from participation in some form of recreation.
- . using leisure time in self-satisfying ways.

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150

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Social Studies

SPECIFIC AREA: People and Communities

The student knows:

- . . that people form communities to help each other.
- . . that country's communities are made up of many different groups of people.
- . . that an ethnic group is a group of people who share a common culture; language, customs, heritage, religion.
- . . that there are many different ethnic groups in this country.
- . . that the heritage of a people affects their way of life (celebrations, food, clothing, language, religion, music and recreation).

The student is able to:

The student values:

- . . the cultural contributions of the different ethnic groups to the development of our communities.
- . . and respects the rights of individuals to their cultural differences.

Page	Suggested Grade Placement	District Placement				
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SUBJECT: Social Studies

SPECIFIC AREA: People in the Community Work to Meet Their Needs.

Page
Suggested
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Placement

The student knows:

- the relationship between, and interdependency of, jobs in the local community.
- the size of a community determines the types of jobs available to the residents of that community.
- geography and weather determine the types of jobs that are available in certain communities.

K 1 2 3 4

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The student is able to:

- identify occupations in the local community.

2

The student values:

- the dignity and worth of work and workers.
- the importance of jobs in the local community (as an aid to the economy and productivity of people).
- his/her job at school as a student and his/her job at home.

2
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SUBJECT: Social Studies

SPECIFIC AREA: People in the Community Organize to Meet Their Needs.

Page
Suggested
Grade Placement
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Placement

The student knows:

- that community rules (laws) are necessary for group living and that rules protect the well-being of the community.
- that people in the community choose leaders and give them authority to run the community.
- that elected leaders in the community are chosen through the vote of the people.
- that the taxes people pay provide for the public services needed by the citizens of our community (fire, police, schools, parks, libraries, streets, roads).
- that people in communities organize to meet cultural needs.
- that people in communities organize to meet religious needs.
- that people in communities organize to meet educational needs.
- that people in communities organize to control pollution and other problems.

The student is able to:

- identify elected leaders and their respective areas of responsibilities: Mayor, Governor and President.

The student values:

- the services available in the community: recreation, fire safety, garbage collection, streets, roads.

Page	Suggested Grade Placement	District Placement
	K	1 2 3 4
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SUBJECT: Social Studies

SPECIFIC AREA: Small Communities and How They Change.

Page
Suggested
Grade Placement
District
Placement

The student knows:

- that small communities differ from each other in size and in the way people meet their needs.
- that a community changes as the needs of the people living in it change.
- that some communities grow larger, while other communities grow smaller.
- that rural communities are usually small, have a low density population and often provide products for the urban communities.
- small communities rely on the big cities for some services.
- that rate of change in a community varies, communities change rapidly or gradually.

K 1 2 3 4

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The student is able to:

- identify causes of community change: technology, industry, transportation, recreation, people needs.

2

The student values:

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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: The Cities and How They Develop

Page
Suggested
Grade Placement
District
Placement

The student knows:

- cities have developed in areas where it is easy for people to work and trade.
- technology helped cities to grow.
- the growth of a city is influenced by the natural features of the area in which it is located.
- people living in cities come from a variety of cultural backgrounds.
- people in a neighborhood often group and work together to make their neighborhood and their city a better place to live.
- cities have many problems such as pollution, traffic congestion, and the like.
- many people that work in the city live in suburbs.

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The student is able to:

- identify on a map the important natural features (rivers, ports, etc.) of a city.
- explain why people usually do not live in the downtown area (CBD).
- give reasons why cities have more pollution problems than the countryside.
- identify similarities and differences in rural, urban and suburban communities.

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The student values:

- the contributions of all cultural groups to the richness of city life.
- attempts to beautify and clean the city.

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2

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SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Our Land--Developed by the People

Page
Suggested
Grade Placement
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Placement

The student knows:

- that in the United States the westward expansion of the railroad affected the development of the land.
- that in the United States colonization, western expansion and immigration affected the use of the land.
- that technology and the industrial revolution affected the use of the land and increased production.
- that in the United States the cultural background of many of the immigrants influenced the way they used the land.
- that the life of early Americans was tied closely to the land and its resources.
- that the Government played a role in systematically using the land in order to meet the needs of people.

	K	1	2	3	4
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The student is able to:

- identify ways the railroad affected the development of the land.

3

The student values:

- the contributions the immigrants and pioneers have made in the development of the land.

3

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SUBJECT: Social Studies

SPECIFIC AREA: Our Land--In Our World

page
Suggested
Grade Placement
District
Placement

The student knows:

- . that people use the land to meet their need for recreation.
- . that people use the land to meet their need for food.
- . that people use the land to meet their need for natural resources.
- . that the type of climate influences the way the land is used.
- . that in some areas the land resources influence the work people do.
- . that the level of technology influences the way the land is used.
- . that our nation is one of the largest nations in the world.
- . that our nation is one of the leading nations in the world.

	K	1	2	3	4

The student is able to:

- . identify several natural resources found within the land and describe how these natural resources benefit the lives of people.
- . compare the different uses of land within the following regions: wetlands, deserts, forests, mountains.
- . compare the technology of an underdeveloped country (e.g., India) to a developed country (e.g., U.S.) as it affects land usage in each country (hand plow v. tractor).
- . identify the largest nations in the world (Russia, Canada, China, U.S., India).
- . identify some of the leading nations of the world.

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The student values:

- . the need to care for land as a source of recreation.

3

157

SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Our Land--A Challenge to Man

page
Suggested
Grade Placement
District
Placement

The student knows:

- . that groups (private, citizens, businesses, state, local and national government) are working to protect the environment. 3
- . that a people's survival is dependent upon clean resources such as water and air. 3
- . that environmental problems (water, air, noise, pollution) in the cities are acute and citizen groups and government groups are working systematically toward their solution. 3
- . that concentrated populations in the cities result in such problems as: housing, transportation, education, employment (work). 3
- . that governments have a concern regarding concentrated populations in the cities. 3
- . that urban renewal is a never-ending process that requires government leadership and civic cooperation. 3
- . that as urban areas continue to grow, their problems become more complex. 3
- . that there are non-renewable resources such as oil (petroleum), natural gas and minerals. 3
- . that there are renewable resources such as lumber, food, people, water, soil, nitrogen, carbon. 3

The student is able to:

- . evaluate present uses or abuses of the land on the basis of how they might affect the future. 3
- . list several methods used in attempting to protect our environment (litter control, pollution control, noise control). 3
- . identify problems caused by the increase of population in the cities. 3
- . identify problems caused by overcrowding in the cities. 3

The student values:

- . the beauty of his/her immediate environment. 3
- . the Earth and accepts responsibility for its preservation. 3
- . the need for continual improvement of one's community. 3
- . the wise use of natural resources to preserve them for future use. 3

SUBJECT: Social Studies

SPECIFIC AREA: Indians of Washington State

Page
Suggested
Grade Placement
District
Placement

The student knows:

- early Indians of Washington State lived in three major regions--the coastal region, the Puget Sound region and the inland plateau region.
- early Indians of Washington State lived in tribal groups that differed in size.
- early Indians of Washington State utilized the natural environment to satisfy their basic physical needs.
- white people came to the Northwest for a variety of reasons and interrupted and threatened the way of life of the Indian people.
- contemporary Indians of Washington State live in tribes with reservations, in tribes without reservations, or in the cities.
- contemporary Indians strive to increase their land base and to develop programs that would make them self-supporting.
- urban Indians have organized to help each other and fight for their rights as full members of the American society.
- Indians of Washington State have a rich culture which they try to preserve.

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K 1 2 3 4

The student is able to:

The student value:

- the contributions of the Indians of Washington State and appreciate their cultural values.

3

SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Map and Globe Skills

Page
Suggested
Grade Placement
District
Placement

The student knows:

- the directions of left and right; up and down.
- the Earth is the place in which we live.
- the globe is a representation of the Earth.

K
K
K

K 1 2 3 4

The student is able to:

- identify a map as being a special flat drawing of a location.
- identify a globe as a small model of the Earth.
- identify land and water (by color) on the map or globe.

K
K
K

The student values:

100

SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Map and Globe Skills--Symbolism, Directions

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

Symbolism:

- map symbols are special combinations of colors, shapes and lines on maps.
- map symbols stand for real objects or information.
- map symbols and maps are much smaller than the objects they represent.

Directions:

- the names of the four main geographic directions are North, South, East and West.
- the letter symbols N., S., E., W., stand for the words North, South, East and West.
- the opposites of each of the four cardinal directions.

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The student is able to:

Symbolism:

- identify water and land by color.
- draw a simple room map using symbols.

Directions:

- name the four main cardinal directions.
- match the cardinal directions with symbols N., S., E., W.
- give the opposite of each cardinal direction.

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The student values:

101

SUBJECT: Social Studies

SPECIFIC AREA: Map and Globe Skills-Geographic Knowledge

	Page	Suggested Grade Placement				District Placement								
		K	1	2	3	4								
The student knows:														
<ul style="list-style-type: none"> map and globes provide information about names of places, what they are, and where they are located. 	1													
<ul style="list-style-type: none"> oceans are the largest bodies of water and continents are the largest land areas. 	1													
<ul style="list-style-type: none"> North America is the name of our continent and it is surrounded by three oceans. 	1													
<ul style="list-style-type: none"> North America is divided into countries and the United States of America is the name of our country. 	1													
<ul style="list-style-type: none"> the United States of America is divided into 50 areas called states, and Washington is the name of our state. 	1													
<ul style="list-style-type: none"> his/her city or local community is within the state. 	1													
<ul style="list-style-type: none"> day and night is caused by the sun and the spinning of the earth. 	1													
The student is able to:														
<ul style="list-style-type: none"> refer to maps and globes for geographic information. 	1													
<ul style="list-style-type: none"> locate oceans and continents on a globe. 	1													
<ul style="list-style-type: none"> locate and identify North America and its surrounding oceans (Pacific, Atlantic, Arctic). 	1													
<ul style="list-style-type: none"> locate his/her country (USA) on a map or globe. 	1													
<ul style="list-style-type: none"> locate the State of Washington on a map or globe. 	1													
The student values:														



SUBJECT: Social Studies

SPECIFIC AREA: Map and Globe Skills--Legend and Key

Page
Suggested
Grade Placement
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The student knows:

- the meaning of several commonly used map symbols: rivers, mountains, cities.
- the meaning of both the terms "key" and "legend."
- the importance of the key or legend as the first reference to use in order to discuss the meanings of map symbols.
- the names of the four main directions and their opposites.
- that directions are used to find the locations of places on maps and globes.
- that the word "sphere" is used to describe the round shape of the earth.
- that the globe is very small and the earth is very large (scale).
- that a globe is the most accurate representation of the earth because it has the same shape.
- that maps provide more detail than globes.
- an atlas contains many different kinds of maps.

K	1	2	3	4

The student is able to:

- locate the key or legend on a map.
- use the key on a map to explain the various symbols found on a map.
- locate West, North and South when given the direction East (where the sun rises).
- use directions to locate places on a map.
- find and identify some oceans, continents, countries, states and cities on globes and maps.

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2

The student values:



SUBJECT: Social Studies

SPECIFIC AREA: Map and Globe Skills--Geographic Knowledge

Page
Suggested
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The student knows:

- the names and locations of the seven continents and four oceans.
- the difference between the terms continents, oceans, countries, states and cities.
- that the equator is an imaginary line that divides the earth in half, midway between the north and south poles.
- that the word "hemisphere" describes half of a sphere and that the earth can be divided into any number of hemispheres.
- that all of the earth north of the equator is the northern hemisphere and that all of the earth south of the equator is the southern hemisphere.
- that winter, spring, summer and autumn are the names of seasons and that the tilt of the earth and its movement around the sun is the cause of seasonal changes.
- the term "distortion" and that a globe is a more accurate representation of the earth than a flat world map.
- that world maps can be more detailed and convenient to use than globes and that they are valuable references as long as the observer is aware of the distortion.

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The student is able to:

- locate the equator on maps and globes.
- locate the northern and southern hemispheres on a globe.
- indicate how the climatic conditions of an area would change with the changes of the angle of the sun's rays upon the earth.
- use the term "distort (ed, ion)" to explain why the globe is a more accurate representation of the earth than a flat world map.
- give reasons why world maps are sometimes more useful than globes.
- label the seven continents and four oceans on either a nameless slate, globe or a world map.
- give examples of a continent, ocean, country, state and city on a globe.

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The student values:

SMALL SCHOOLS PROJECT

SUBJECT: Social Studies

SPECIFIC AREA: Map and Globe Skills--Symbolism

Page
Suggested
Grade Placement
District
Placement

The student knows:

- that the key and/or legend is used to interpret symbols on a map.
- that maps show both man-made and natural features on earth, (bridges, dams, roads, cities, mountains, lakes, rivers, islands).
- the difference between map symbols for an international boundary and a national boundary, cities of different sizes and capital cities on a United States map.

X 1 2 3 4

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The student is able to:

- use a key and/or legend to interpret map symbols shown on a map.
- identify the natural and man-made features shown on a map.
- show examples of an international boundary, a national boundary, a city of over one million and a capital city on a United States map.

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The student values:

SUBJECT: Social Studies

SPECIFIC AREA: Map and Globe Skills--Directions

Page
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The student knows:

- . that the sun appears to rise in the east and set in the west.
- . the names of the four main directions and their opposites.
- . that the cardinal directions are determined by the south and north poles.
- . that north is toward the north pole, south is toward the south pole and that north, south, east and west can be determined on a globe by following along the printed grid lines.

	K	1	2	3	4

The student is able to:

- . determine east or west from the position of the sun.
- . determine any of the other three directions when given either north, south, east or west as a reference.
- . locate and identify the north and south poles on a globe.
- . locate any place north, south, east or west of a given reference on a globe by using the grid lines as a guide. (complete understanding of the grid system is not expected).

The student values:



SMALL SCHOOLS PROJECT

SCIENCE PROGRAM GOALS

1. The student values science as a way of learning and communicating about self, others and the environment.
2. The student is able to use scientific problem-solving and inquiry processes.
3. The student is able to use the conventional language, instruments and operations of science.
4. The student knows significant scientific assumptions, theories, principles, laws, facts and their cultural and historical contexts.
5. The student is able to use scientific knowledge, processes and conventions to clarify values, examine issues, solve personal and social problems and to satisfy personal curiosity.
6. The student relates science learnings to the planning and fulfilling of personal, social and career life roles.
 - A. The student realizes and takes an active responsibility for applying scientific learnings to his/her own life.
 - B. The student realizes that scientific learnings relate directly to his/her actions which can affect the society, family, community, nation and world.
 - C. The student realizes and takes an active responsibility for directing the relationship of science to society.
7. The student values science for its aesthetic contribution to his/her continuing personal experience.
8. The student is able to initiate personally novel ideas related to science.
9. The student is confident of his/her right to develop, hold or express conventional or unusual ideas related to science.
10. The student possesses the initiative and skill to formulate productive, scientific questions.

SMALL SCHOOLS PROJECT

SCIENCE
SCOPE (K-3)

I.	CHANGE.....	159
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SMALL SCHOOLS PROJECT

SUBJECT: Science

SPECIFIC AREA: Change

Page
Suggested
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The student knows:

- change occurs only as a result of interaction between two or more things.
- all things change with time.
- changes vary in their nature, e.g., physical, chemical, state and position.
- certain factors produce change, e.g., an application of a force, addition or subtraction of a substance from a compound or mixture, heat and light.

K-3
1-3
2-3
1-3

The student is able to:

- identify changes in objects, e.g., shape, position, direction of movement, as the result of an application of force.
- identify changes in a substance, e.g., ice to water and water to vapor, as the result of an application of heat.
- identify changes in substances as the result of exposure to light, e.g., darkening of photographic paper, browning of newsprint, darkening of ozalid paper, fading of construction paper.
- identify changes in substances as the result of exposure to air, e.g., rusting of iron, drying of bread, apple turning brown.
- identify changes in plants due to maturation.
- identify changes in animals due to maturation and/or need for protection.
- identify daily changes in the weather, e.g., temperature, relative humidity, cloudiness.

K-3
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K-3

The student values:

- weather changes for recreation and variation.
- his/her own physical, mental and social growth.

K-3
K-3

SUBJECT: Science

SPECIFIC AREA: Cycles

Page
Suggested
Grade Placement
District
Placement

K 1 2 3 4

The student knows:

- the term "cycle" means a series of events or operations that recur regularly and usually head back to the starting point.
- there are several common cycles which influence his/her life, e.g., life cycles, earth-sun cycle, earth-moon cycle, water cycle, weather cycles.
- some cycles may influence the nature of other cycles.
- the progression of the daily earth-sun cycle.
- the progression of the yearly earth-sun cycle.
- the progression of the phases of the moon.
- the progression of the water cycle.
- there are many job opportunities in science.

K-3
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K-3
K-1
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K-3

The student is able to:

- identify the major events in the life cycle of a plant (formation of seeds, seed leaves and roots, stem and leaves, flowers).
- identify the major stages (egg, larvae, pupae, adult) in the life cycle of an animal such as the Darkling Beetle (meal worm).
- identify position changes in a shadow (shadow stick) as the hourly and daily position of the sun changes.
- identify local noon.
- identify seasonal changes (winter, spring, summer, autumn) as the sun changes its relative position on the horizon.
- identify hourly and daily position changes of the moon.
- identify the major events in the progression of the water cycle (evaporation, transportation, condensation).
- identify the progression of weather changes as the seasons change.

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K-3

The student values:

- weather changes for recreation and variation.

2-3

SUBJECT: Science

SPECIFIC AREA: Energy

Page
Suggested
Grade Placement
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Placement

K 1 2 3 4

The student knows:

- that energy is the ability of an animal or system to bring about changes in its surroundings or in itself.
- that energy may take many forms, e.g., heat, light, electrical, motion, mechanical, sound.
- that we depend on numerous sources of energy, e.g., animals, wood, coal, natural gas, oil, electricity, wind, sun.
- that one form of energy may be converted to another form of energy, e.g., heat to electrical, wind to mechanical, electrical to mechanical.
- that energy may be transferred from one object or organism to another object or organism.
- that there are many job opportunities in science.

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The student is able to:

- identify different forms of energy used in his/her daily experience, e.g., heat, light, electrical, oil, sun, sound.
- identify energy chains in his/her daily environment, e.g., food chain: sun--grass--cattle--human.
- identify evidence of energy transfer, e.g., electricity to operate a motor to move an object; vibrating wire to produce sound.
- identify variables that affect the amount of energy transferred, e.g., mass and velocity of moving objects.

1-3
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The student values:

- the developed ways of utilizing and conserving limited energy sources.
- developing new ways of conserving limited energy sources.
- developing new ways of using unlimited energy sources.

K-3
K-3
K-3

SUBJECT: Science

SPECIFIC AREA: Environment

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . there is order to everything in our environment. 2-3
- . interdependence means two or more things supporting each other in some way. 2-3
- . interaction means at least two things acting on one another. 2-3
- . the place an organism lives is called its "habitat." 2-3
- . change in the organism to meet changing environmental conditions is called "adaptation." 2-3
- . "population" means organisms of the same type living in a definable area. 2-3
- . clean air and water are essential to maintaining a healthful environment. K-3
- . non-living things obtained from the earth are composed of minerals. 2-3
- . rocks are composed of minerals. 2-3
- . soil is mostly composed of weathered rocks. 2-3
- . there are many job opportunities in science. K-3

The student is able to:

- . identify order in nature. K-3
- . identify examples of interdependence in nature. 2-3
- . describe the function of an organism's habitat, e.g., provides shelter, food, conditions for reproduction. 2-3
- . identify examples of adaptation in our environment, e.g., different colors, different beak forms, different forms of locomotion, different diets, different leaf forms, different root patterns. 2-3
- . identify the effects of air and water pollution on plants and animals in restricted environments. K-3
- . identify several common minerals, e.g., quartz, feldspar, mica. 2-3
- . identify several common rocks, e.g., granite, basalt, limestone, shale. 2-3
- . identify several common soil forms, e.g., clay, loam, sand. 2-3
- . demonstrate how they can conserve and enjoy their environment. 2-3

The student values:

- . that order enables us to organize and function within our environment. 2-3
- . interdependence and interaction as necessary to the survival of an environment. 2-3
- . change and adaptation as necessary to the survival within an environment. 2-3

SMALL SCHOOLS PROJECT

SUBJECT: Science

SPECIFIC AREA: Organisms

Page
Suggested
Grade Placement
District
Placement

The student knows:

- . all things are classified as living or non-living.
- . all living things are classified as either plant or animal.
- . the gross characteristics of plants, e.g., growth, production of its own food, reproduction.
- . the gross characteristics of animals, e.g., growth, uses of other organisms as food, locomotion, rapid response to stimuli, reproduction.
- . organisms must reproduce in order to continue the species.
- . individual organisms may die, but the species will continue if reproduction is adequate.
- . organisms respond to change in their environment, e.g., wet-dry, warm-cold, light-dark.
- . fossils represent examples of former plants or animals.
- . there are many job opportunities in science.

	K	1	2	3	4
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K-3					

The student is able to:

- . classify things as living or non-living.
- . classify living things as plant or animal.
- . identify the main parts of certain plants as root, stem, leaf and flower.
- . describe the function of the root, stem, leaf and flower.
- . identify the conditions of good plant growth, e.g., light, water, air, soil.
- . describe the germination of seeds, e.g., beans - (cycles).
- . describe ways in which seeds are transported.
- . identify the main parts of certain animals as head, body, apparatus for locomotion, apparatus for obtaining food, eye.
- . describe the function of major parts of an animal, e.g., of the insect-head, thorax, abdomen, legs, eye.
- . identify the conditions for good animal growth, e.g., air, water, food, adequate temperature in the environment, shelter or protective mechanism.
- . describe the stages of animal development, e.g., youth, maturity, old age.
- . identify ways in which animals obtain food.
- . identify ways in which animals protect themselves, e.g., coloration, flight, fang, claw.
- . identify responses of plants and animals to changes in their environment, e.g., reduced body temperature (animal), loss of moisture (plant and animal), inability to manufacture food (plant), loss of skin pigmentation (animal), avoidance of adverse stimuli (animal).

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K-1					
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The student values:

- . the role of plants in his/her daily life.
- . the role of animals in his/her daily life.
- . his/her behavior as an organism.

K-3					
K-3					
K-3					

SMALL SCHOOLS PROJECT

SUBJECT: Science

SPECIFIC AREA: Property of Matter

Page
Suggested
Grade Placement
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Placement

The student knows:

- the names of primary colors.
- the names of primary shapes, e.g., square, circle, triangle, rectangle, diamond.
- that texture is a property of objects and substances, e.g., rough, smooth.
- that taste is a property of many substances.
- that odor is a property of many substances.
- that color is a property of many objects and substances.
- that weight is a property of objects.
- that size is a property of objects.
- that shape is a property of many objects.
- that solids occupy space, have a definite shape, and have mass.
- that liquids take the shape of their containers, occupy space and have mass.
- that gases take the shape of their containers, occupy all the space in their containers and have mass.

K-1

K-1

K-1

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K-1

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K-3

The student is able to:

- group objects according to color.
- group objects according to shape.
- reproduce a shape when given its name.
- group objects by weight.
- group objects according to size.
- group objects by texture.
- group objects by one property.
- group objects by more than one property.
- compare properties of objects.
- identify some of the materials from which objects are made.
- identify the properties of the same material in different forms, e.g., liquid, wood, metal.
- demonstrate that an object's form can change while its material composition remains the same.
- demonstrate that some objects float in water and that some sink.

K-1

K-1

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K-1

K-1

K-2

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K-1

2-3

K-2

The student values:

- properties as a means of identification.
- the use of properties in describing objects and organisms.

2-3

2-3

Page
Suggested
Grade Placement
District
Placement

SUBJECT: Science

SPECIFIC AREA: Symmetry

K 1 2 3 4

The student knows:

- symmetry means correspondence in size, shape and relative position of parts on opposite sides of a dividing line, in a repeated sequence, or about a center or axis.
- the primary aspect of symmetry is balance.
- bilateral symmetry means matching on both sides of a center line.
- rotational symmetry means matching of the original pattern as an object is turned around its center.
- translational symmetry means repetition of pattern in a sequence.

K-3
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1-3

The student is able to:

- identify symmetrical and nonsymmetrical patterns.
- classify objects and/or organisms as examples of bilateral, rotational or translational symmetry.
- identify corresponding elements in symmetrical patterns.
- construct elements or parts to complete symmetrical patterns.

K-2
2-3
1-3
K-3

The student values:

- symmetry in nature.
- symmetry of man-made objects.
- symmetry as an aspect of beauty.

K-3
K-3
K-3

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