

KINDERGARTEN

ENGLISH

The kindergarten student will be immersed in a print -rich environment to develop oral language skills, phonological awareness, print awareness, vocabulary, comprehension, and an appreciation for literature. The reading of fiction and nonfiction selections will enable students to develop an awareness of print materials as sources of information and enjoyment. The kindergarten student will have the opportunity to use words that describe people, places, things, and events. The student will recognize and print letters of the alphabet, use the basic phonetic principles of identifying and writing beginning sounds, identify story elements, and communicate ideas through pictures and writing.

Oral Language

K.1 The student will demonstrate growth in the use of oral language.

a) Listen to a variety of literary forms, including stories and poems.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to listen to a variety of literacy forms, including stories and poems by:

- listening to texts read aloud
- asking appropriate questions and making appropriate comments about text.

b) Participate in a variety of oral language activities including choral and echo speaking and recitation of short poems, rhymes, songs, and stories with repeated word patterns.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to participate in oral language activities, choral speaking and echo reading of short poems, rhymes, songs, and stories with repeated patterns and refrains by:

- participating in choral speaking and echo speaking of short poems, rhymes, songs, and stories with repeated patterns and refrains.

c) Participate in oral generation of language experience narratives.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to participate in oral generation of language experience narratives by:

- dictating sentences about a group experience for a group language experience narrative (e. g., a story about a class field trip).
- dictating an experience or story to create an individual language experience narrative (e.g., story about a family pet).

d) Participate in creative dramatics.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to participate in creative dramatics by:

- using drama to retell familiar stories, rhymes, and poems (e. g., storytelling with role play or puppets).
- participating in creative dramatics, such as classroom songs, plays, skits, and group activities designed to give students frequent opportunities for listening and speaking.

e) Use complete sentences that include subject, verb, and object.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use complete sentences by

- using complete sentences that include subject, verb, and object when speaking

K.2 The student will expand understanding and use of word meanings.

a) Increase listening and speaking vocabularies.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to expand understanding and use of word meanings by:

- understanding that learning new words enhances communication.

b) Use number words.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use number words by:

- understanding and using number words in conversations, during partner and group activities, and during teacher-directed instruction.
- using number words in conversation.

c) Use words to describe/name people, places and things.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use words to describe/name people, places and things by:

- using words to describe or name people, places, feelings, and things during partner and group activities and during teacher-directed instruction.

d) Use words to describe/name location, size, color, and shape.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use words to describe location, size, color and shape by:

- using size, shape, color, and spatial words to describe people, places, and things during group or individual activities and during teacher-directed instruction.
- using words to show direction and location (e. g., on, off, in, out, over, under, between, and beside).

e) Use words to describe/name actions.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use words to describe actions by:

- using a variety of words to describe the actions of characters and people in real and make-believe settings in response to stories or class activities.

f) Ask about words not understood.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to ask about words not understood by:

- recognizing when they do not understand a word or phrase and seeking clarification by asking a peer or an adult.

g) Use vocabulary from other content areas.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use vocabulary from other content areas by:

- using vocabulary from content areas during partner or group activities and during teacher-directed instruction.

K.3 The student will build oral communication skills.

a.) Express ideas in complete sentences and express needs through direct requests.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to express ideas and needs in complete sentences by:

- speaking audibly in complete sentences, expressing thoughts, feelings and ideas clearly.
- verbally expressing needs through direct requests.

b) Begin to initiate conversations.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to begin to initiate conversations by:

- initiating conversations with peers and teachers in a variety of school settings.
- speaking in complete sentences

c) Begin to follow implicit rules for conversation, including taking turns and staying on task.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to follow implicit rules for conversation (e. g. taking turns and staying on topic) by:

- listening attentively to others in a variety of formal and informal settings involving peers and adults.
- waiting for their turn to speak, allowing others to speak without necessary interruptions.
- maintaining conversation on topic through multiple exchanges.

d) Listen and speak in informal conversations with peers and adults.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to listen and speak in informal conversations with peers and adults by:

- listening attentively to others in a variety of formal and informal settings involving peers and adults.
- participating in a range of collaborative discussions building on others' ideas and clearly expressing their own
- (e. g., one-on-one, small group, teacher led).

e) Participate in group and partner discussions about various texts and topics.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to participate in discussions about texts and topics by:

- participate in partner or group activities (i.e., conversations, discussions, book chats, retelling of stories, choral speaking, language experience narratives, morning routines, dramatizations and role play).
- listen to and discuss a variety of texts that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.

f) Begin to use voice level, phrasing, and intonation appropriate for various language situations.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to begin to use voice level, phrasing, and intonation appropriate for language situations by:

- using appropriate voice level in conversation.
- using appropriate phrasing and intonation in conversation.
- match language to the purpose, situation, environment, and audience.

g) follow one- and two- step directions

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to follow one and two- step directions by:

- repeating and following one- and two- step oral directions

h) Begin to ask how and why questions.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to ask how and why questions by:

- asking who, what, where, when, why, and how questions to obtain information, seek help, or clarify something not understood.

K.4 The student will identify, say, segment and blend various units of speech sounds.

a) Begin to discriminate between spoken sentences, words, and syllables.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify, say, segment and blend sound by:

- focusing on speech sounds
- demonstrating the concept of word by segmenting spoken sentences into individual words.
- segmenting a word into individual syllables by clapping hands or snapping fingers.
- discriminating between large phonological units of running speech, sentences, words, and syllables

a.) Identify and produce words that rhyme.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify words that rhyme by:

- identifying a word that rhymes with a spoken word.
- supplying a word that rhymes with a spoken word.
- producing rhyming words and recognizing pairs of rhyming words presented orally
- generating rhyming words based on a given rhyming pattern.
- supplying an appropriate rhyming word to complete a familiar nursery rhyme or a predictable text with rhyming lines.

c) Blend and segment multisyllabic words at the syllable level.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to blend and segment multisyllabic words by:

- blending and segmenting consonants and rimes of spoken words (e. g., /b/- /oat/= boat.
- blending and segmenting multisyllabic words into syllables (e.g., the teacher asks students to say robot without the /ro/ and students respond with /bot/).
- recognizing that a word can be segmented into individual speech sound units.

d) Segment one-syllable words into speech sounds units including beginning phoneme onset and ending (rimes).

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to segment one syllable words into sounds by:

- recognizing how phonemes sound when spoken in isolation.
- segmenting one- syllable words into onset and rime (e.g., the teacher says the word hat and when asked the student verbally says /h/ for the onset and /at/ for the rime)
- segmenting one- syllable words into speech sound units (e.g., the teacher says the word bat, and the student segments the sounds /b/- /a/- /t/).

e) Identify words according to shared beginning and/or ending sounds.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify words according to shared beginning and ending sounds by:

- recognizing similarities and differences in beginning and ending sounds of words.
- producing a word that has the same beginning or ending sounds as a spoken word
- identifying pictures of objects whose name share the same beginning or ending sound.
- sorting pictures or objects whose names share the same beginning or ending sound.

Reading

K.5 The student will understand how print is organized and read.

a) Hold print materials in correct position.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to understand how print is organized by:

- holding printed material the correct way.

b) Identify the front cover, back cover, and title page of a book.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify the front cover, back cover, and the title page of a book by:

- Identifying the front and back cover of a book
- distinguishing the title page from all the other pages in a book.
- turning pages appropriately

c) Distinguish between print and pictures.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to distinguish between print and pictures by:

- distinguishing print from pictures.

d) Follow words from left to right and from top to bottom on a printed page.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to follow words from left to right and top to bottom on a printed page by:

- following text with a finger, pointing to each word as it is read from left to right and top to bottom
- locating lines of text, words, letters and spaces.

e) Match voice with print (concept of word).

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to match voice with print by:

- locating periods, question marks, and exclamation points.
- matching voice with print in syllables, words, and phrases.

K.6 The student will demonstrate and understand that print conveys meaning.

a) Identify common signs and logos.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify common signs and logs by:

- applying knowledge that print conveys meaning.
- recognizing and identifying common signs logos, and labels

b) Explain that printed materials provide information.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to explain that printed materials provide information by:

- applying knowledge that print conveys meaning.
- explaining that printed material provides information.

c) Read and explain own writing and drawings.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to read and explain own writings and drawing by:

- reading and explaining their own drawing.
- reading and explaining their own writings.

d) Read his/her name and read fifteen meaningful, concrete words.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to read his/her own name and concrete words by:

- locating commonly used words and phrases in familiar text.
- recognizing a selection of high- frequency and sight words as well as read fifteen meaningful, concrete words.
- recognizing and identifying their own first and last names.

K.7 The student will develop an understanding of basic phonetic principles.

a) Identify and name the uppercase and lowercase letters.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify both the uppercase and lowercase letters of the alphabet by:

- recognizing and naming rapidly and with ease uppercase and lowercase letters in sequence and in random order.
- matching uppercase and lowercase letter pair.
- producing the usual sounds of consonants, short vowels and initial consonant digraphs

b) Match consonant, short vowels, and initial consonant digraph sounds to appropriate letters.

CHESAPEAKE OBJECTIVE:

The students will demonstrate the ability to match consonant and short vowel sounds to appropriate letters by:

- producing the usual sounds of consonants, short vowels and initial consonant digraphs.
- writing the grapheme (letter) that represents a spoken sound
- using basic knowledge of one-to-one letter-sound correspondences by producing sounds for each consonant.

c) Demonstrate a speech-to-print match through accurate finger-point reading in familiar text that includes words with more than one syllable.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to demonstrate a speech to print match through finger-point reading by:

- demonstrating concept of a word by tracking familiar print from left to right and top to bottom.
- matching spoken words to print including words with more than one syllable.

d) Identify beginning consonant sounds in single-syllable words.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify beginning consonants in single-syllable words by:

- isolating initial consonants in single-syllable words (e.g., /t/ is the first sound in top).
- identifying long and short sounds with common spelling for the five major vowels.
- distinguishing between similarly spelled words by identifying sounds of the letters that differ.
- segmenting onsets and rimes and begin to blend to form the words.

K.8 The student will expand vocabulary.

a) Discuss meanings of words.

CHESAPEAKE OBJECTIVE:

- The student will demonstrate the ability to discuss meanings of word by:
- discussing meanings of specific words including synonyms and antonyms in partner, group and teacher-guided settings.
- identifying new meanings for familiar words and apply them accurately.

b) Develop vocabulary by listening to a variety of texts read aloud.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to develop vocabulary by listening to a variety of texts read aloud by:

- asking and responding to questions about unknown words in a text.
- identifying real-life connections between words and their use.
- using newly learned words in literacy tasks.

K.9 The student will demonstrate comprehension of fictional texts.

a) Identify what an author does and what an illustrator does.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to identify what an author does and what an illustrator does by:

- identifying the author's role of selected texts.
- Identifying the illustrator's role of selected texts.
- making ongoing predictions based on illustrations and texts.
- describing the relationship between illustration and the story.

b) Relate previous experience to what is read.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to relate previous experiences to what is read by:

- linking knowledge from their own experiences to make sense of and talk about a text.

c) Use pictures to make predictions.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use pictures to make predictions by:

- making ongoing predictions based on illustrations and text.
- describing the relationship between illustrations and the story.
- linking knowledge from their own experience to make sense of and talk about the text.

d) Begin to ask and answer questions about what is read.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to ask and answer questions about what is read by:

- giving evidence that they understand the meaning of what is being read aloud, including the who, what, when, where, why, and how.
- asking and responding to simple questions about the content of a book.

e) Use story language in discussions and retellings.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to use language in discussions and retellings by:

- using vocabulary from story in discussions and retellings.
- producing artwork or a written response (letters or phonetically spelled words) that demonstrates comprehension of a story that they have heard read aloud.

f) Retell familiar stories, using beginning, middle, and end.

CHESAPEAKE OBJECTIVE:

- The student will demonstrate the ability to retell familiar stories using beginning, middle and end by:
 - retelling a story from pictures or text in their own words, arranging the events in the correct sequence (beginning, middle, and end)
 - using words to sequence events (e. g., before, after, and next)

g) Discuss characters, setting, and events.

CHESAPEAKE OBJECTIVE:

The student will demonstrate the ability to discuss characters, setting, and events by:

- using descriptive language to talk about characters, settings, and events of a story.

K.10 The student will demonstrate comprehension of nonfiction texts.

a) Use pictures to identify topic and make predictions.

CHESAPEAKE OBJECTIVE:

- The student will demonstrate the ability to use pictures to identify topic and make predictions by:
 - making ongoing predictions based on graphics and text.
 - relating pictures and illustrations to the text in which they appear.
 - identifying the topic of a nonfiction selection.
 - asking and responding to simple questions about the content of a book.

b) Identify text features specific to the topic, such as titles, headings, and pictures.

CHESAPEAKE OBJECTIVE:

- The student will demonstrate the ability to identify text feature specific to the topic, such as titles, headings, and pictures by:
 - identifying text features including titles, headings and pictures in text.
 - identifying the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

Writing

K.11 The student will print in manuscript.

a) Print uppercase and lowercase letters of the alphabet independently.

CHESAPEAKE OBJECTIVE:

- The student will demonstrate the ability to print the uppercase and lowercase letters of the alphabet independently by:
 - using appropriate pencil grip
 - printing upper- and lower- case letters of the alphabet legibly and independently.

MATH

The kindergarten standards place emphasis on counting; combining, sorting, and comparing sets of objects; recognizing and describing simple patterns; and recognizing shapes and sizes of figures and objects. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies such as calculators and computers. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative concepts and relationships or for proficiency in basic computations.

Mathematics has its own language, and the acquisition of specialized vocabulary and language patterns is crucial to a student's understanding and appreciation of the subject. Students should be encouraged to use correctly the concepts, skills, symbols, and vocabulary identified in the following set of standards.

Problem solving has been integrated throughout the six content strands. The development of problem-solving skills should be a major goal of the mathematics program at every grade level. Instruction in the process of problem solving will need to be integrated early and continuously into each student's mathematics education. Students must be helped to develop a wide range of skills and strategies for solving a variety of problem types.

K.1 The student, given two sets, each containing 10 or fewer concrete objects, will identify and describe one set as having more, fewer, or the same number of members as the other set, using the concept of one-to-one correspondence.

- Match each member of one set with each member of another set, using the concept of one-to-one correspondence to compare the number of members between sets, where each set contains 10 or fewer objects.
- Compare and describe two sets of 10 or fewer objects, using the terms *more*, *fewer*, and *the same*.
- Given a set of objects, construct a second set which has more, fewer or the same number of objects.

K.2 The student, given a set, containing 15 or fewer concrete objects, will

a) tell how many are in the set by counting the number of objects orally;

- b) write the numeral to tell how many are in the set; and
- c) select the corresponding numeral from a given set of numerals.

Count orally the number of objects in a set containing 15 or fewer concrete items, using one-to-one correspondence, and identify the corresponding numeral.

Identify written numerals from 0 through 15 presented in random order.

Select the numeral from a given set of numerals that corresponds to a set of 15 or fewer concrete items.

Write the numerals from 0 through 15.

Write a numeral that corresponds to a set of 15 or fewer concrete items.

CHESAPEAKE OBJECTIVE: *Match sets of objects to corresponding numerals.

*Now part of SOL

K.3 The student, given an ordered set of ten objects and/or pictures, will indicate the ordinal position of each object, first through tenth, and the ordered position of each object.

- Identify the ordinal positions first through tenth using ordered sets of ten concrete objects and/or pictures of such sets presented from
 - left-to-right;
 - right-to-left;
 - top-to-bottom; and/or
 - bottom-to-top.

K.4 The student will

a) count forward to 100 and backward from 10;

b) identify one more than a number and one less than a number; and

c) count by fives and tens to 100.

- Count forward from 0 to 100.
- Count backward from 10 to 1.
- Recognize the relationship of one more than and one less than a number using objects (i.e., five and one more is six, and one less than ten is nine).
- Group 100 or fewer objects together into sets of fives or tens and then count them by fives or by tens.
- Investigate and recognize the pattern of counting by fives to 100, using a variety of tools.
- Investigate and recognize the pattern of counting by tens to 100, using a variety of tools.

CHESAPEAKE OBJECTIVE: *Count by rote to 100.

*Now part of SOL

K.5 The student will identify the parts of a set and/or region that represent fractions for halves and fourths.

- Recognize fractions as representing parts of equal size of a whole.
- Given a region, identify half and/or a fourth of the region.
- Given a set, identify half and/or a fourth of the set.

K.6 The student will model adding and subtracting whole numbers, using up to 10 concrete objects.

- Combine two sets with known quantities in each set, and count the combined set using up to 10 concrete objects, to determine the sum, where the sum is not greater than 10.
- Given a set of 10 or fewer concrete objects, remove, take away, or separate part of the set from a given and determine the result.

K.7 The student will recognize a penny, nickel, dime, and quarter and will determine the value of a collection of pennies and/or nickels whose total value is 10 cents or less.

- Describe the properties/characteristics (e.g., color, relative size) of a penny, nickel, dime, and quarter.
- Identify a penny, nickel, dime, and quarter.
- Identify that a nickel is the same value as five pennies.
- Count a randomly placed collection of pennies and/or nickels (or models of pennies and/or nickels) whose value is 10 cents or less, and determine the value of the collection.

K.8 The student will identify the instruments used to measure length (ruler), weight (scale), time (clock: digital and analog; calendar: day, month, season), and temperature (thermometer).

- Identify a ruler as an instrument to measure length.
- Identify different types of scales as instruments to measure weight.
- Identify different types of clocks (analog and digital) as instruments to measure time.
- Identify the components of a calendar, including days, months, and seasons.

- Identify different types of thermometers as instruments used to measure temperature.

K.9 The student will tell time to the hour, using analog and digital clocks.

- Tell time on an analog clock to the hour.
- Tell time on a digital clock to the hour.

K.10 The student will compare two objects or events, using direct comparisons or nonstandard units of measure, according to one or more of the following attributes: length (shorter, longer), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder). Examples of nonstandard units include foot length, hand span, new pencil, paper clip, and block.

- Compare and describe lengths of two objects (as shorter or longer), using direct comparison or nonstandard units of measure (e.g., foot length, hand span, new pencil, paper clip, block).
- Compare and describe heights of two objects (as taller or shorter), using direct comparison or nonstandard units of measure (e.g., book, hand span, new pencil, paper clip, block).
- Compare and describe weights of two objects (as heavier or lighter), using direct comparison or nonstandard units of measure (e.g., book, cubes, new pencil, paper clip, block).
- Compare and describe temperatures of two objects or environment (as hotter or colder), using direct comparison.

CHESAPEAKE OBJECTIVE: Identify sizes: taller, tallest, longer, longest.

K.11 The student will

a) identify, describe, and trace plane geometric figures (circle, triangle, square, and rectangle); and

b) compare the size (larger, smaller) and shape of plane geometric figures (circle, triangle, square, and rectangle).

- Identify a circle, triangle, square, and rectangle.
- Describe the characteristics of triangles, squares, and rectangles, including number of sides and number of angles.
- Describe a circle using terms such as round and curved.
- Trace a circle, triangle, square, and rectangle.
- Compare and group plane geometric figures (circle, triangle, square, and rectangle) according to their relative sizes (larger, smaller).
- Compare and group plane geometric figures (circle, triangle, square, and rectangle) according to their shapes.
- Distinguish between examples and nonexamples of identified geometric figures (circle, triangle, square, and rectangle).

K.12 The student will describe the location of one object relative to another (above, below, next to) and identify representations of plane geometric figures (circle, triangle, square, and rectangle) regardless of their positions and orientations in space.

- Identify pictorial representations of a circle, triangle, square, and rectangle, regardless of their position and orientation in space.
- Describe the location of one object relative to another, using the terms *above*, *below*, and *next to*.

K.13 The student will gather data by counting and tallying.

- Use counting and tallying to gather data on categories identified by the teacher and/or student (e.g., favorites, number of days of various types of weather during a given month, types of pets, types of shoes).

K.14 The student will display gathered data in object graphs, picture graphs, and tables, and will answer questions related to the data.

- Display data by arranging concrete objects into organized groups to form a simple object graph.
- Display gathered data, using pictures to form a simple picture graph (e.g., a picture graph of the types of shoes worn by students on a given day).
- Display gathered data in tables, either in rows or columns.
- Answer questions related to the gathered data displayed in object graphs, picture graphs, and tables by:
 - Describing the categories of data and the data as a whole (e.g., the total number of responses) and its parts.
 - Identifying parts of the data that represent numerical relationships, including categories with the greatest, the least, or the same.

- K.15 The student will sort and classify objects according to attributes.**
- Sort objects into appropriate groups (categories) based on one attribute.
 - Classify sets of objects into groups (categories) of one attribute.
 - Label attributes of a set of objects that has been sorted.
 - Name multiple ways to sort a set of objects.
- K.16 The student will identify, describe, and extend repeating patterns.**
- Observe and identify the basic repeating pattern (core) found in repeating patterns of common objects, sounds, and movements that occur in practical situations.
 - Identify the core in a repeating pattern.
 - Extend a repeating pattern by adding at least two repetitions to the pattern.
 - Create a repeating pattern.
 - Compare similarities and differences between patterns

SCIENCE

The kindergarten standards stress the use of basic science skills to explore common materials, objects, and living things and will begin the development of an understanding that scientific knowledge is based on evidence. Emphasis is placed on using the senses to gather information. Students are expected to develop skills in posing simple questions, measuring, sorting, classifying, and communicating information about the natural world. The science skills are an important focus as students learn about life processes and properties of familiar materials such as magnets and water. Through phenomena including shadows, patterns of weather, and plant growth, students are introduced to the concept of change. The significance of natural resources and conservation is introduced in the kindergarten standards.

Scientific Investigation, Reasoning, and Logic

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which:

- a) basic characteristics of objects are identified by direct observation;
- b) observations are made from multiple positions to achieve different perspectives;
- c) a set of objects is sequenced according to size;
- d) a set of objects is separated into two groups based on a single physical characteristic;
- e) nonstandard units are used to measure the length, mass, and volume of common objects;
- f) observations and predictions are made from an unseen member in sequence of objects;
- g) a question is developed and predictions are made from one or more observations;
- h) observations are recorded;
- i) picture graphs are constructed;
- j) unusual or unexpected results in an activity are recognized; and
- k) objects are described both pictorially and verbally.

K.2 The students will investigate and understand that humans have senses that allow them to seek, find, take in, and react or respond to information in order to learn about one's surroundings.

Key concepts include:

- a) five senses and corresponding sensing organs; and
- b) sensory descriptors used to describe common objects and phenomena.

Force, Motion, and Energy

K.3 The student will investigate and understand that magnets have an effect on some materials, make some things move without touching them, and have useful applications.

Key concepts include:

- a) magnetism and its effects;
- b) useful applications of magnetism.

Matter

K.4 The student will investigate and understand that the position, motion, and physical properties of an object can be described.

Key concepts include:

- a) colors of objects;
- b) shapes and forms of objects;
- c) textures and feel of objects;
- d) relative sizes and weights of objects;and
- e) relative positions and speed of objects.

K.5 The student will investigate and understand that water flows and has properties that can be observed and tested.

Key concepts include:

- a) water occurs in different phases;
- b) water flows downhill; and
- c) some materials float in water, while others sink.

Life Processes

K.6 The student will investigate and understand the differences between living organisms and nonliving objects.

Key concepts include:

- a) all things can be classified as living or nonliving; and
- b) living organisms have certain characteristics that distinguish them from nonliving objects including growth, movement, response to the environment, having offspring, and the need for food, air, and water.

K.7 The student will investigate and understand basic needs and life processes of plants and animals.

Key concepts include:

- a) animals need adequate food, water, shelter, air, and space to survive;
- b) plants need nutrients, water, air, light, and a place to grow to survive;
- c) plants and animals change as they grow, have varied life cycles, and eventually die; and
- d) offspring of plants and animals are similar but not identical to their parents and one another.

Interrelationships in Earth/Space Systems

K.8 The student will investigate and understand that shadows occur when light is blocked by an object.

Key concepts include:

- a) shadows occur in nature when sunlight is blocked by an object; and
- b) shadows can be produced by blocking artificial light sources.

Earth Patterns, Cycles, and Change

K. 9 The student will investigate and understand that there are simple repeating patterns in his/her daily life.

Key concepts include:

- a) weather observations;
- b) the shapes and forms of many common natural objects including seeds, cones, and leaves; and
- c) and animal growth.

K.10 The student will investigate and understand that change occurs over time, and rates may be fast or slow.

Key concepts include:

- a) natural and human-made things may change over time; and
- b) changes can be observed and measured.

Earth Resources

K.11 The student will investigate and understand that materials can be reused, recycled, and conserved.

Key concepts include:

- a) materials and objects can be used over and over again;
- b) everyday materials can be recycled; and
- c) water and energy conservation at home and in school helps ensure resources are available for future use.

HISTORY AND SOCIAL SCIENCE

The standards for kindergarten students include an introduction to interesting Americans in history whose lives demonstrated the virtues of patriot-ism, courage, and kindness. During the course of their first year in school, students should learn basic concepts related to history, patriotism, national symbols, good citizenship, geographic location, economics, and the importance of following rules and respecting the rights and property of other people.

History

K.1 The student will recognize that history describes events and people of other times and places by

- a) identifying examples of past events in legends, stories and historical accounts of Powhatan, Pocahontas, George Washington, Betsy Ross, and Abraham Lincoln.
- b) identifying the people and events honored by the holidays of Thanksgiving Day, Martin Luther King, Jr. Day, President's Day, and Independence Day (Fourth of July).

K.2 The student will describe everyday life in the present and in the past and begin to recognize that things change over time.

Geography

K.3 The student will describe the relative location of people, places, and things by using positional words, with emphasis on near/far, above/below, left/right, and behind/in front.

K.4 The student will use simple maps and globes to
a) develop an awareness that a map is a drawing of a place to show where things are located and that a globe is a round model of the Earth;
b) describe places referenced in stories and real-life situations;
c) locate land and water features.

K.5 The student will develop an awareness that maps and globes
a) show a view from above;
b) show things in smaller size;
c) show the position of objects.

Economics

K.6 The student will match simple descriptions of work that people do with the names of those jobs.

K.7 The student will
a) recognize that people make choices because they cannot have everything they want.
b) explain that people work to earn money to buy things they want.

Civics

K.8 The student will demonstrate that being a good citizen involves
a) taking turns and sharing;
b) taking responsibility for certain classroom chores;
c) taking care of personal belongings and respecting what belongs to others;
d) following rules and understanding the consequence of breaking rules;
e) practicing honesty, self-control, and kindness to others;
f) participating in decision-making in the classroom;
g) participating successfully in group settings.

K.9 The student will recognize the American flag and the Pledge of Allegiance and know that the President is the leader of the United States.

MUSIC

Music Theory/Literacy

K.1 The student will read music, including high and low pitches and rhythms represented by traditional or nontraditional notations.

Performance

K.2 The student will investigate various uses of the voice by demonstrating the difference between the singing voice and the speaking voice; matching pitches within an appropriate range; and demonstrating expressive qualities of music, including loud/soft and fast/slow.

K.3 The student will sing a variety of songs of limited range alone and with others, including
• singing two-pitch (*sol, mi*) songs, using echo and ensemble singing; and
• singing at the appropriate time following a musical introduction.

K.4 The student will play a variety of pitched and non-pitched instruments alone and with others, including
• demonstrating high and low;
• demonstrating loud/soft and fast/slow; and
• accompanying songs and chants, using body percussion as well as instruments.

K.5 The student will perform rhythmic patterns that include sounds and silences, using instruments, body percussion, and voice.

K.6 The student will demonstrate a steady beat, using body percussion, instruments, and voice.

K.7 The student will respond to music with movement, including
• matching locomotor and nonlocomotor movements to rhythmic patterns;
• demonstrating expressive qualities of music, including loud/soft and fast/slow;

- illustrating moods and contrast in music and children's literature;
- performing dances and other music activities from various cultures; and
- exhibiting respect for the personal space of others when moving.

K.8 The student will create music by

- improvising simple melodic or rhythmic patterns; and
- improvising to enhance stories and poems.

Music History and Cultural Context

K.9 The student will explore historical and cultural aspects of music by

- listening to and recognizing patriotic and seasonal songs; and identifying people who make music as musicians (e.g., singers, instrumentalists, composers, conductors).

K.10 The student will participate in music activities that involve sharing, taking turns, and other behaviors that demonstrate good citizenship.

K.11 The student will recognize the relationships between music and other fields of knowledge.

Analysis, Evaluation, and Critique

K.12 The student will analyze music by

- distinguishing among men's, women's, and children's voices;
- identifying selected instruments visually and aurally;
- classifying sound sources as vocal, instrumental, or environmental; and
- recognizing basic contrasts in music, including fast/slow, high/low, loud/soft, and same/different.

Aesthetics

K.13 The student will express personal feelings evoked by a musical experience.

K.14 The student will communicate personal response to expressive features of music through movement.

PHYSICAL EDUCATION

Motor Skill Development

K.1 The student will demonstrate progress toward the mature form of selected locomotor, non-locomotor, and manipulative skills to understand the various ways the body can move.

- Demonstrate and differentiate between walking, running, hopping, galloping, and jumping
- Demonstrate bending, pushing, pulling, turning, and balancing on one foot.
- Demonstrate approaching-mature form (at least two critical elements: which are small, isolated parts of the whole skill or movement) used in stationary manipulative skills for tossing and throwing underhand to targets, bounce and catch, toss and catch, kicking stationary ball to target, striking stationary object with paddle, dribbling, rolling ball underhand to target, trapping and volleying with hand.
- Demonstrate a minimum of two critical elements used in manipulative skills while moving, to include dribbling with continuous kick (taps) of ball while walking.
- Demonstrate moving to a beat and to rhythmic patterns using basic locomotor and non-locomotor rhythmic patterns.
- Demonstrate moving forward, sideways, and in side-to-side directions.
- Demonstrate moving at low, medium, and high levels.
- Demonstrate traveling in straight, curving, and zigzagging pathways.
- Demonstrate fast, slow, and moderate speeds.
- Demonstrate jumping over a stationary rope and a self-turn single jump.
- Demonstrate one roll (narrow or curled)

Anatomical Basis of Movement

K.2 The student will identify basic structures of the body and basic spatial awareness concepts.

- Explain that the body has muscles and bones that help the body move.
- Identify that the heart as a special muscle that helps the body move.
- Explain that moving faster makes the heart beat faster.
- Demonstrate the concept of personal space.

Fitness Planning

- K.3** The student will identify basic fitness concepts.
- Explain that physical activity helps the body grow.
 - Identify activities that can be done at home to keep the body healthy.
 - Identify physical activities that are done with family and with friends for fun.

Social Development

- K.4** The student will use appropriate behaviors and safe practices in physical activity settings.
- Demonstrate cooperative and safe play.
 - Demonstrate general and personal space.
 - Identify three classroom (procedural) rules.

Energy Balance

- K.5** The student will identify basic concepts of energy balance.
- Explain that food provides energy for movement.
 - Identify one fruit and one vegetable.
 - Explain that fruits and vegetables help the body keep moving.

ART

Visual Communication and Production

- K.1** The student will create works of art that represent personal responses to art-making problems.
- K.2** The student will create works of art that express feelings and ideas.
- K.3** The student will follow a sequence of steps used in creating works of art.
- K.4** The student will create works of art that commemorate personal or community events.
- K.5** The student will create works of art that connect to everyday life.
- K.6** The student will create works of art that include the human figure as subject matter.
- K.7** The student will identify and use the following in works of art:
- Color—red, blue, yellow, green, orange, violet, brown, black, white
 - Line—straight/curved, thick/thin, long/short, up/down/across
 - Shape—circle, square, triangle, rectangle, oval
 - Texture—visual, tactile
 - Pattern—occurring naturally, made by people
- K.8** The student will recognize that objects occupy space.
- K.9** The student will identify spatial relationships—left, right, top, bottom, side, center, front, back, over, and under.
- K.10** The student will create drawings from observation.
- K.11** The student will use motor skills (e.g., pinching, pulling, squeezing, twisting, pounding, rolling, folding, cutting, modeling, stamping) to create two-dimensional and three-dimensional works of art.

Art History and Cultural Context

- K.12** The student will identify people who make art as “artists.”
- K.13** The student will identify purposes for creating works of art.
- K.14** The student will describe the concept that people in all cultures create works of art.

Analysis, Evaluation, and Critique

- K.15** The student will describe and respond to works of art.
- K.16** The student will classify objects in the environment by their visual qualities (e.g., color, texture, line, shape, pattern).

Aesthetics

- K.17** The student will select a preferred work of art and explain why it was chosen.
- K.18** The student will describe ideas, experiences, and feelings expressed in personal and other works of art.