

# 4-H Curriculum Connections to the Virginia Standards of Learning

## Cloverbud

### 90014 Mud, Muck, and Other Wonderful Things

- English K.1 The student will demonstrate growth in the use of oral language.
- Listen to a variety of literary forms, including stories and poems.
  - Participate in choral speaking and recite short poems, rhymes, songs, and stories with repeated patterns.
  - Participate in creative dramatics.
  - Begin to discriminate between spoken sentences, words, and syllables.
  - Recognize rhyming words.
  - Generate rhyming words in a rhyming pattern.
- English K.2 The student will use listening and speaking vocabularies.
- Use number words.
  - Use words to describe/name people, places, and things.
  - Use words to describe location, size, color, and shape.
  - Use words to describe actions.
  - Ask about words not understood.
  - Follow one-step and two-step directions.
  - Begin to ask how and why questions.
- English K.3 The student will build oral communication skills.
- Begin to follow implicit rules for conversation, including taking turns and staying on topic.
  - Express ideas and needs in complete sentences.
  - Begin to use voice level, phrasing, and intonation appropriate for language situation.
  - Listen and speak in informal conversations with peers and adults.
  - Begin to initiate conversations.
  - Participate in discussions about books and specific topics.
- English K.11 The student will write to communicate ideas.
- a) draw pictures and/or use letters and phonetically spelled words to write about experiences, stories, people, objects, or events.
  - b) Write left to right and top to bottom.
- Science K.1 The student will conduct investigations in which
- basic properties of objects are identified by direct observation;

- observations are made from multiple positions to achieve different perspectives;
- a set of objects is sequenced according to size;
- a set of objects is separated into two groups based on a single physical attribute;
- picture graphs are constructed using 10 or fewer units;
- nonstandard units are used to measure common objects;
- an unseen member in a sequence of objects is predicted;
- a question is developed from one or more observations;
- objects are described both pictorially and verbally;  
and
- unusual or unexpected results in an activity are recognized.

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

- water occurs in different states (solid, liquid, gas);
- the natural flow of water is downhill; and
- some materials float in water while others sink.

Science K.6 The student will investigate and understand basic needs and life processes of plants and animals. Key concepts include

- living things change as they grow and need food, water, and air to survive;
- plants and animals live and die (go through a life cycle); and
- offspring of plants and animals are similar but not identical to their parents and one another.

Science K.8 The student will investigate and understand simple patterns in his/her daily life. Key concepts include

- weather observations;
- the shapes and forms of many common natural objects including seeds, cones, and leaves;
- animal and plant growth; and
- home and school routines.

Science K.9 The student will investigate and understand that change occurs over time, and rates may be fast or slow. Key concepts include

- natural and human-made things may change over time; and
- changes can be noted and measured.

Science K.10 The student will investigate and understand that materials can be reused, recycled, and conserved. Key concepts include

- materials and objects can be used over and over again;
- everyday materials can be recycled; and
- water and energy conservation at home and in school helps preserve resources for future use.

- English 1.1 The student will continue to demonstrate growth in the use of oral language.
- Listen and respond to a variety of media, including books, audiotapes, videos, and other age-appropriate materials.
  - Tell and retell stories and events in logical order.
  - Participate in a variety of oral language activities, including choral speaking and reciting short poems, rhymes, songs, and stories with repeated patterns.
  - Express ideas orally in complete sentences.

- English 1.2 The student will continue to expand and use listening and speaking vocabularies.
- Increase oral descriptive vocabulary.
  - Begin to ask for clarification and explanation of words and ideas.
  - Follow simple two-step oral directions.
  - Give simple two-step directions.
  - Use singular and plural nouns.

- English 1.3 The student will adapt or change oral language to fit the situation.
- Initiate conversation with peers and adults.
  - Follow rules for conversation.
  - Use appropriate voice level in small-group settings.
  - Ask and respond to questions in small-group settings.

- English 1.12 The student will write to communicate ideas.
- Generate ideas.
  - Focus on one topic.
  - Use descriptive words when writing about people, places, things, and events.
  - Use complete sentences in final copies.
  - Begin each sentence with a capital letter and use ending punctuation in final copies.
  - Use correct spelling for high-frequency sight words and phonetically regular words in final copies.
  - Share writing with others.
  - Use available technology.

- Science 1.1 The student will plan and conduct investigations in which
- differences in physical properties are observed using the senses;
  - simple tools are used to enhance observations;
  - objects or events are classified and arranged according to attributes or properties;
  - observations and data are communicated orally and with simple graphs, pictures, written statements, and numbers;

- length, mass, and volume are measured using standard and nonstandard units;
- inferences are made and conclusions are drawn about familiar objects and events;
- predictions are based on patterns of observation rather than random guesses; and
- simple experiments are conducted to answer questions.

Science 1.4 The student will investigate and understand that plants have life needs and functional parts can be classified according to certain characteristics. Key concepts include

- needs (food, air, water, light, and a place to grow);
- parts (seeds, roots, stems, leaves, blossoms, fruits); and
- characteristics: edible/nonedible, flowering/nonflowering, evergreen/deciduous.

Science 1.5 The student will investigate and understand that animals, including people, have life needs and specific physical characteristics and can be classified according to certain characteristics. Key concepts include

- life needs (air, food, water, and a suitable place to live);
- physical characteristics (body coverings, body shape, appendages, and methods of movement); and
- characteristics (wild/tame, water homes/land homes).

Science 1.6 The student will investigate and understand the basic relationships between the sun and the Earth. Key concepts include

- the sun is the source of heat and light that warms the land, air, and water; and
- night and day are caused by the rotation of the Earth.

Science 1.7 The student will investigate and understand the relationship of seasonal change and weather to the activities and life processes of plants and animals. Key concepts include how temperature, light, and precipitation bring about changes in

- plants (growth, budding, falling leaves, and wilting);
- animals (behaviors, hibernation, migration, body covering, and habitat); and
- people (dress, recreation, and work).

Science 1.8 The student will investigate and understand that natural resources are limited. Key concepts include

- identification of natural resources (plants and animals, water, air, land, minerals, forests, and soil);
- factors that affect air and water quality; and
- recycling, reusing, and reducing consumption of natural resources.

English 2.1 The student will demonstrate an understanding of oral language structure.

- Create oral stories to share with others.
- Create and participate in oral dramatic activities.
- Use correct verb tenses in oral communication.
- Use increasingly complex sentence structures in oral communication.

English 2.2 The student will continue to expand listening and speaking vocabularies.

- Use words that reflect a growing range of interests and knowledge.
- Clarify and explain words and ideas orally.
- Follow oral directions with three or four steps.
- Give three-step and four-step directions.
- Identify and use synonyms and antonyms in oral communication.

English 2.3 The student will use oral communication skills.

- Use oral language for different purposes: to inform, to persuade, and to entertain.
- Share stories or information orally with an audience.
- Participate as a contributor and leader in a group.
- Summarize information shared orally by others.

English 2.11 The student will write stories, letters, and simple explanations.

- Generate ideas before writing.
- Organize writing to include a beginning, middle, and end.
- Revise writing for clarity.
- Use available technology.

Science 2.1 The student will plan and conduct investigations in which

- observations are repeated to ensure accuracy;
- two or more attributes are used to classify items;
- pictures and bar graphs are constructed using numbered axes;
- length, volume, mass, and temperature measurements are made in metric (centimeters, meters, liters, degrees Celsius, grams, kilograms) and standard English units (inches, feet, yards, cups, pints, quarts, gallons, degrees Fahrenheit, ounces, pounds);
- observation is differentiated from personal interpretation, and conclusions are drawn based on observations;
- simple physical models are constructed;
- conditions that influence a change are defined; and
- unexpected or unusual quantitative data are recognized.

Science 2.3 The student will investigate and understand basic properties of solids, liquids, and gases. Key concepts include

- mass and volume; and
- processes involved with changes in matter from one state to another (condensation, evaporation, melting, and freezing).

Science 2.5 The student will investigate and understand that living things are part of a system. Key concepts include

- living organisms are interdependent with their living and nonliving surroundings; and
- habitats change over time due to many influences.

Science 2.6 The student will investigate and understand basic types, changes, and patterns of weather. Key concepts include

- temperature, wind, precipitation, drought, flood, and storms; and
- the uses and importance of measuring and recording weather data.

Science 2.7 The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings. Key concepts include

- effects on growth and behavior of living things (migration, hibernation, camouflage, adaptation, dormancy); and
- weathering and erosion of the land surface.

Science 2.8 The student will investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits in nature. Key concepts include

- important plant products (fiber, cotton, oil, spices, lumber, rubber, medicines, and paper);
- the availability of plant products affects the development of a geographic area; and
- plants provide homes and food for many animals and prevent soil from washing away.

English 3.1 The student will use effective communication skills in group activities.

- Listen attentively by making eye contact, facing the speaker, asking questions, and summarizing what is said.
- Ask and respond to questions from teachers and other group members.
- Explain what has been learned.

English 3.9 The student will write descriptive paragraphs.

- Develop a plan for writing.
- Focus on a central idea.
- Group related ideas.
- Include descriptive details that elaborate the central idea.
- Revise writing for clarity.

English 3.10 The student will write stories, letters, simple explanations, and short reports across all content areas.

- Use a variety of planning strategies.

- Organize information according to the type of writing.
- Identify the intended audience.
- Revise writing for specific vocabulary and information.
- Use available technology.

English 3.11 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

- Use complete and varied sentences.
- Use the word / in compound subjects.
- Use past and present verb tense.
- Use singular possessives.
- Use commas in a simple series.
- Use simple abbreviations.
- Use apostrophes in contractions with pronouns.
- Use correct spelling for high-frequency sight words, including irregular plurals.

Science 3.1 The student will plan and conduct investigations in which

- questions are developed to formulate hypotheses;
- predictions and observations are made;
- data are gathered, charted, and graphed (line plot, picture graph, and bar graph);
- objects with similar characteristics are classified into at least two sets and two subsets;
- inferences are made and conclusions are drawn;
- natural events are sequenced chronologically;
- length is measured to the nearest centimeter;
- mass is measured to the nearest gram;
- volume is measured to the nearest milliliter and liter;
- temperature is measured to the nearest degree Celsius; and
- time is measured to the nearest minute.

Science 3.5 The student will investigate and understand relationships among organisms in aquatic and terrestrial food chains. Key concepts include

- producer, consumer, decomposer; and
- herbivore, carnivore, omnivore; and predator - prey.

Science 3.6 The student will investigate and understand that environments support a diversity of plants and animals that share limited resources. Key concepts include

- water-related environments (pond, marshland, swamp, stream, river, and ocean environments);
- dry-land environments (desert, grassland, rain forest, and forest environments); and
- population and community.

Science 3.8 The student will investigate and understand basic patterns and cycles occurring in nature. Key concepts include

- patterns of natural events (day and night, seasonal changes, phases of the moon, and tides); and
- animal and plant life cycles.

Science 3.9 The student will investigate and understand the water cycle and its relationship to life on Earth. Key concepts include

- the energy from the sun drives the water cycle;
- processes involved in the water cycle (evaporation, condensation, precipitation);
- water is essential for living things; and
- water supply and water conservation.

Science 3.10 The student will investigate and understand that natural events and human influences can affect the survival of species. Key concepts include

- the interdependency of plants and animals;
- human effects on the quality of air, water, and habitat;
- the effects of fire, flood, disease, and erosion on organisms; and
- conservation and resource renewal.

Science 3.11 The student will investigate and understand different sources of energy. Key concepts include

- the sun's ability to produce light and heat energy;
- sources of energy (sunlight, water, wind);
- fossil fuels (coal, oil, natural gas) and wood; and
- renewable and nonrenewable energy resources.