

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

## Cloverbud

### 90014 (Pub # 426-950) *Digging Down and Growing Up*: Ch. 2, Living with Plants

- 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.
- Math K.8 The student will identify the instruments used to measure length (ruler), weight (scale), time (clock: digital and analog; calendar: day, month, and season), and temperature (thermometer).
- 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.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.
- Math 1.12 The student will use nonstandard units to measure length and weight.
- 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
- other characteristics (wild/tame, water homes/land homes).

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 2.2 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.

Math 2.12 The student will estimate and then use a ruler to make linear measurements to the nearest centimeter and inch, including measuring the distance around a polygon in order to determine perimeter.

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 2.4 The student will investigate and understand that plants and animals go through a series of orderly changes in their life cycles. Key concepts include

- some animals (frogs and butterflies) go through distinct stages during their lives while others generally resemble their parents; and
- flowering plants undergo many changes from the formation of the flower to the development of the fruit.

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 2.8 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.

- Math 3.14 The student will estimate and then use actual measuring devices with metric and U.S. Customary units to measure
- length – inches, feet, yards, centimeters, and meters;
  - liquid volume – cups, pints, quarts, gallons, and liters; and
  - weight/mass – ounces, pounds, grams, and kilograms.

- 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 3.8 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.