CARTERVILLE SCHOOL DISTRICT
SCIENCE CURRICULUM
GRADE 2
Revised 2009

FIRST NINE WEEKS

- ☐ Identify words and construct meanings from text, illustrations, graphics, and charts.
- ☐ Acknowledge that people use scientific processes including hypothesis, making inferences, and recording and communicating data.
- ☐ Identify the basic needs of all living things.
- ☐ Identify the main parts of a plant.
- ☐ Understand that structures of living things and organisms are adapted to their function in specific environments.
- ☐ Understand different ways that living things can be grouped.
- ☐ Recognize that the structural characteristics of plants and animals are used to group them
- ☐ Understand that living organisms need to adapt to their environment to survive.
- ☐ Understand that the amount of food, water, space, and shelter needed is dependent on the size and kind of living things.
- ☐ Recognize that plants and animals adapt to different ranges of temperature and moisture.
- ☐ Compare the characteristics of things that live on land, in the water, and in the air.
- ☐ Identify some characteristics of the vertebrate groups.
- ☐ Use mathematical language to read and interpret data on a simple concrete graph, pictorial graph, or chart.
- ☐ Understand that living things are found almost everywhere in the world.

- ☐ Recognize that activities of humans affect animals in many ways.
- ☐ Explain how animals in a grassland habitat depend on plants and other animals for food.
- ☐ Understand that there is an interdependency of plants and animals that can be shown in a food web.
- ☐ Explain how animals in an ocean depend on plants and other animals for food.
- ☐ Recognize that human beings cause changes in their environment, and these changes can be positive or negative.
- ☐ Understand that plants and animals are dependent upon each other for survival.
- ☐ Explain how animals depend on plants and other animals for shelter and nesting.
- ☐ Explore and identify career opportunities in farming.
- ☐ Understand that living things can reproduce and nonliving things cannot reproduce.
- ☐ Describe how organisms change as they grow and mature.
- ☐ Understand that living things have offspring that resemble their parents.
- ☐ Understand that some organisms have adaptations that enable them to move from one medium to another.
- ☐ Understand that plants and animals produce offspring with similar characteristics but individual differences.
- ☐ Apply math skills using whole numbers to solve real-world problems.
- ☐ Explore and identify career opportunities in marine biology.
- ☐ Increase comprehension by rereading, retelling, and discussion.
- ☐ Recognize that animals and plants can be associated with their environment by and examination of their structural characteristics.

- ☐ Make inferences based on text and prior knowledge.
- ☐ Apply the senses, tools, and instruments to obtain information from his or her surroundings.

SECOND NINE WEEKS

- ☐ Understand that scientists and technologists use a variety of tools.
- ☐ Identify some of the earth's natural resources including land, air, and water; and identify renewable and nonrenewable resources.
- ☐ Recognize resources used by people for water, food, and shelter are limited and necessary for their survival.
- ☐ Understand that the surface of the earth is composed of different types of solid materials that comes in all sizes.
- ☐ Understands the processes of weathering and erosion.
- ☐ Recognize ways that human activity affects the environment.
- ☐ Display solutions to problems by generating, collecting, organizing, and analyzing data using simple graphs and charts.
- ☐ Acknowledge that weather conditions occur in patterns over time.
- ☐ Understand that most natural events occur in patterns.
- ☐ Recognize weather patterns.
- ☐ Understands some impacts of tornadoes and hurricanes.
- ☐ Understands ways to stay safe in tornadoes and hurricanes.
- ☐ Uses a variety of tools to observe, measure, analyze and predict changes in size, mass, temperature, color, position, quantity, sound, and movement.
- ☐ Recognize that men and women of all ethnic and social backgrounds make contributions and practice science and technology.

- ☐ Understand ways objects can be grouped according to similarities or differences of their physical characteristics.
- ☐ Describe how fossils are formed.
- ☐ Explain how fossils give information about plants and animals that lived on earth long ago.
- ☐ Describe different dinosaurs that lived on earth long ago.
- ☐ Explain how new discoveries are made by paleontologists.
- ☐ Use customary and metric units to measure, compare, and order objects according to their lengths, weights, or capacities.
- ☐ Participate in groups to conduct experiments and solve problems.
- ☐ Understand through the use of science processes, people can solve problems and make decisions.

THIRD NINE WEEKS

- ☐ Use metric and standard English units to measure distance, volume, mass, and temperature.
- ☐ Acknowledge that common objects are composed of parts that are too small to be seen without magnification and they can use a variety of tools to examine the objects.
- ☐ Identify ways objects can be grouped according to similarities or differences of their physical characteristics.
- ☐ Understand how to sort organisms, objects, and events based on patterns.
- ☐ Recognize examples and observable properties of solids, liquids, and gases.
- ☐ Verify that things can be done to materials to change some of their physical properties.
- ☐ Recognize that many things are made of smaller pieces, different amounts, and various shapes.

- ☐ Understand that not all objects or materials respond to change in the same way.
- ☐ Understand ways energy and matter interact.
- ☐ Use nonstandard methods to compare and order objects according to their lengths or weights.
- ☐ Recognize that same material can exist in different states.
- ☐ Understand that a thermometer measures the amount of heat absorbed by an object.
- ☐ Understand that the Sun supplies heat and light energy to earth.
- ☐ Identify different heat sources.
- ☐ Understand ways energy and matter interact.
- ☐ Understand the relationship of food to the need for energy for daily activities.
- ☐ Understand that some materials will allow light to pass through and others will not.
- ☐ Analyze information to make predictions, make sketches and diagrams to explain ideas, draw conclusions using information and prior knowledge.
- ☐ Communicate measurement concepts.
- ☐ Understand and explain shadows, color, and other light phenomena.
- ☐ Compare the amount of pushing and pulling required to move objects of various sizes across the floor.
- ☐ Understand that objects exhibit different kinds of motion.
- ☐ Understand that the amount and direction of the force exerted on an object determines how much the object will move.
- ☐ Understand that there is a relationship between force and motion.
- ☐ Identify examples of simple machines and understand how they change effort.

- ☐ Explain ways that simple machines make work easier.
- ☐ Understand that objects may be moved by being pushed and pulled with magnets.
- ☐ Demonstrate that some vibrations may be heard.
- ☐ Understand that sound is caused by vibrations.
- ☐ Understand that properties of sound such as pitch and loudness can be altered by changing the properties of the sound source.
- ☐ Understand that sound travels differently through different media.

FOURTH NINE WEEK

- ☐ Understand that each time the earth completes one rotation, one day has passed which is 24 hours.
- ☐ Realize that the appearance of the sunrise and sunset is due to the rotation of earth every 24 hours.
- ☐ Understand that the moon moves around the earth, earth moves around the sun, and the moon is visible when it reflects the light from the sun.
- ☐ Understand that the stars and planets are always in the sky.
- ☐ Describe objects that are visible in the night sky.
- ☐ Realize that people influence the quality of life of those around them.
- ☐ Identify ways that changes in technology have helped to improve various means of transportation.
- ☐ Identify and describe examples of natural and human-made materials.
- ☐ Decide what information is appropriate and how data can be collected, displayed, and interpreted to answer relevant questions.