

CARTERVILLE SCHOOL DISTRICT
SCIENCE CURRICULUM
GRADE 5
Revised August 2009

The following Inquiry Skills will be taught throughout the year.

- ❑ Identify and describe the skills scientists use.
- ❑ Know the steps of the Scientific Method.
- ❑ Participate in different levels of scientific inquiry.
- ❑ Formulate questions on a specific science topic and choose the steps needed to answer the questions.
- ❑ Formulate a hypothesis.
- ❑ Conduct scientific experiments.
- ❑ Identify variables in an experiment.
- ❑ Understand observation as using one or more of the five senses to gather information.
- ❑ Develop observation skills.
- ❑ Understand and use inference.
- ❑ Understand and make predictions.
- ❑ Be able to classify and use dichotomous keys.
- ❑ Understand how to use and develop models.
- ❑ Identify the importance of communicating scientific information and results.
- ❑ Understand the importance of accurate measurements.
- ❑ Read and interpret data tables and graphs.

FIRST QUARTER

- ❑ Understand how living things are classified.
- ❑ Understand how plants, animals, and protists interact.
- ❑ Distinguish between invertebrates and vertebrates.
- ❑ Identify characteristics of mosses, ferns, conifers, and flowering plants.
- ❑ Understand the parts of cells.
- ❑ Understand how cells form tissues and organs.
- ❑ Understand how organs work together in different body systems.
- ❑ Describe how blood flows through the human body.
- ❑ Understand the respiratory system.
- ❑ Understand the digestive and urinary systems.

SECOND QUARTER

- ❑ Understand how plants make their own food through photosynthesis.
- ❑ Understand the function of stems and roots.
- ❑ Describe how plants reproduce.
- ❑ Identify factors that affect plant growth.
- ❑ Identify the parts of an ecosystem.
- ❑ Describe the characteristics of biomes and how organisms adapt.
- ❑ Identify the characteristics of water ecosystems.
- ❑ Compare and contrast relationships between organisms in an ecosystem.
- ❑ Describe how energy moves through an ecosystem.
- ❑ Understand the carbon dioxide, oxygen, and nitrogen cycles.

THIRD QUARTER

- ❑ Understand how changes in the environment affect ecosystems.
- ❑ Identify how inheritance and interaction with the environment can cause change.
- ❑ Understand what happens to plants and animals when habitats change.
- ❑ Describe what Earth's oceans are like.
- ❑ Identify where fresh water is found.
- ❑ Understand how water cycles through the environment.
- ❑ Explain how clouds form and how they affect precipitation.
- ❑ Identify Earth's layers.
- ❑ Explain what causes earthquakes and volcanoes.
- ❑ Describe how weathering and erosion change Earth's surface.
- ❑ Explain how minerals and rocks are identified.

FOURTH QUARTER

- ❑ Identify the properties of matter.
- ❑ Understand the difference between atoms and molecules.
- ❑ Explain how matter changes between solid, liquid and gas.
- ❑ Compare mixtures and solutions.
- ❑ Understand physical and chemical changes.
- ❑ Describe and classify chemical reactions.
- ❑ Understand how chemical properties are used.
- ❑ Learn how chemical technology improves our lives.
- ❑ Describe the parts of a wetland ecosystem.

- Understand the importance of wetlands.
- Identify macroinvertebrates.
- Dissect owl pellets.