Jackson Area Catholic Schools

Science Academic Standards
for
Fourth Grade

Scientific Inquiry

SI.04.01 The student will make purposeful observations of the natural world, using the appropriate senses.

SI.04.02 The student will generate questions based on observations**.**

SI.04.03 The student will plan and construct simple and fair investigations.

SI.04.04 The student will manipulate simple tools that aid observation and data collection.

SI.04.05 The student will make accurate measurements with appropriate units for the measurement tool.

SI.04.06 The student will construct simple charts and graphs from data and observations.

SI.0407 The student will summarize information from charts and graphs to answer scientific questions.

SI.04.08 The student will share ideas about science through purposeful conversation in collaborative groups.

SI.04.09 The student will communicate and present findings of observations and investigations.

SI.04.10 The student will develop research strategies and skills for information gathering and problem solving.

SI.04.11 The student will compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences

SI.04.12 The student will demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

SI.04.13 The student will use data/samples as evidence to separate fact from opinion.

SI.04.14 The student will evidence when communicating scientific ideas.

SI.04.15 The student will identify technology used in everyday life.

Scientific Inquiry (cont.)

SI.0416 The student will identify current problems that may be solved through the use of technology.

SI.04.17 The student will describe the effects humans and other organisms have on the balance of the natural world.

SI.04.18 The student will describe how people have contributed to science throughout history and across cultures.

Life Science

LS.04.01 The student will describe the structures and functions of plants**.**

LS.04.02 The student will identify the living and non-living components of various ecosystems and analyze the feeding relationships within those ecosystems.

LS.04.03 The student will analyze the physical and behavioral characteristics that organisms need for survival**.**

LS.04.04 The student will analyze the structure and functions of the human digestive and excretory systems, tracing the flow of food and elimination of wastes through the body.

Earth Science

ES.04.01 The student will explain how rocks and fossils in layers of the Earth indicate previously existing life forms.

ES.04.02 The student will demonstrate movements of the Earth and Moon as they orbit the Sun.

ES.04.03 The student will compare and contrast selected characteristics of the Earth, Sun and Moon.

ES.04.04 The student will identify the basic factors that affect weather.

ES.04.05 The student will describe characteristics of the ocean.

Physical Science

PS.04.01 The student will investigate how various forms of energy affect objects and identify common uses of each (heat, light, sounds, electrical energy, magnetism, and energy of motion, temperature).

PS.04.02 The student will demonstrate ability to measure matter.

PS.04.03 The student will observe, describe and record evidence of physical changes in matter and describe how changing size and shape can alter the usefulness of matter.

PS.04.04 The student will investigate the properties and usefulness of magnets and describe the effect and interactions of magnets on various objects, including other magnets.

PS.04.05 The student will explain how electrical energy is transferred and changed through the use of a simple circuit.

PS.04.06 The student will create a simple working electromagnet and explain the conditions necessary to make the electromagnet**.**