

## Catholic Identity: Integration of Our Faith

- 1.1A display a deep sense of wonder and delight about the natural universe \*
- 1.1B describe the unity of faith and reason \*
- 1.1C describe relationships, elements, underlying order, harmony, and meaning \*
- 1.1D share concern and care for the environment as part of God's creation\*

## Learning Process Standards

- 1.2 The student uses scientific practices during laboratory and scientific investigations and uses critical thinking and scientific problem solving to make informed decisions. The student explains how science properly limits its focus to “how” things physically exist and is not designed to answer issues of meaning, the value of things, or the mysteries of the human person. \* The student lists the basic contributions of significant Catholics to science. \*

### Tools to Know

- 1.2A plan and conduct investigations
- 1.2B collect information using appropriate scientific tools

### Ways to Show

- 1.2C record and organize data and observations
- 1.2D communicate observations about investigations

## Properties of Matter

- 1.3 **Matter and energy.** The student knows that objects have properties and patterns.

### Applied Standards

- 1.3A classify objects by observable properties such as larger and smaller, heavier and lighter, shape, color, and texture

### Supporting Standards

- 1.3A.1 predict and identify changes in materials caused by heating and cooling
- 1.3A.2 classify objects by the materials from which they are made

## Force, Motion, and Energy

- 1.4 **Force, motion, and energy.** The student knows that force, motion, and energy are related and are a part of everyday life.

- 1.4A identify and discuss how different forms of energy such as light, thermal, and sound are important to everyday life
- 1.4B predict and describe how a magnet can be used to push or pull an object
- 1.4C demonstrate and record the ways that objects can move such as in a straight line, zig zag, up and down, back and forth, round and round, and fast and slow

## Rocks, Soil, and Water

- 1.5 **Earth and space.** The student knows that the natural world includes rocks, soil, and water that can be observed in cycles, patterns, and systems, and shares concern and care for the environment as a part of God's creation. \*

- 1.5A observe, compare, describe, and sort components of soil by size, texture, and color
- 1.5B identify and describe a variety of natural sources of water, including streams, lakes, and oceans

- 1.5A.1 identify how rocks, soil, and water are used to make products

- 1.5B.1 explain the processes of conservation, preservation, overconsumption, and stewardship in relation to caring for that which God has given us. \*

## Patterns in the Natural World

**1.5 Earth and space.** The student knows that the natural world includes the air around us and objects in the sky and describes God’s relationship with man and nature. \*

1.5C record weather information, including relative temperature such as hot or cold, clear or cloudy, calm or windy, and rainy or icy

1.5C.1 demonstrate that air is all around us and observe that wind is moving air

1.5D observe and record changes in the appearance of objects in the sky such as the Moon and stars, including the Sun

1.5E identify characteristics of the seasons of the year and day and night

## Relationships of Plants and Animals

**1.6 Organisms and environments.** The student knows that the living environment is composed of relationships between organisms and the life cycles that occur and explains how creation is an outward sign of God’s love. \*

1.6A sort and classify living and nonliving things based upon whether they have basic needs and produce offspring

1.6B gather evidence of interdependence among living organisms such as energy transfer through food chains or animals using plants for shelter

1.6B.1 analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver

## Characteristics of Plants and Animals

**1.6 Organisms and environments.** The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments.

1.6C observe and record life cycles of animals such as a chicken, frog, or fish

1.6C.1 investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats

1.6C.2 compare ways that young animals resemble their parents

1.6D identify and compare the parts of plants