

2006-2007 Science Curriculum for the Diocese of Charleston

I/R/M

Religious
Values

KINDERGARTEN

I. Life Science

A. Human body

1. Body Parts

- I. a. Recognize self as a living thing.
- I. b. Recognize the commonality and uniqueness of each material
- I. c. Classify things as living or non-living
- I. d. Identify various body parts.
- I. e. Identify the functions of various body parts.

Respect for life

Human dignity

**Awe and
wonder**

2. Senses

- I. a. Identify the five body parts used in the five senses.
- I. b. Describe an object using all five senses.

B. Animals

1. Structures

- I. a. Classify animals by their similar characteristics.
- I. b. Observe that animals closely resemble their parents.
- I. c. Describe changes in animals as they grow.
- I. d. Identify ways in which people use animals for food, clothing, etc.

Respect for life

Stewardship

2. Behaviors

- I. a. Observe and describe behaviors of similar animals.

3. Needs

- I. a. Identify the needs of animals (water, food, air, shelter)
- I. b. Explain how the needs of animals are met by their natural habitats.

C. Plants

1. Structures

- I. a. Identify plants as living things – they can grow and produce new plants.
- I. b. Describe some ways in which plants are alike/different.
- I. c. Identify the parts of a plant.
- I. d. Classify seeds by similarities and differences
- I. e. Dissect a seed and identify parts.
- I. f. Observe the growth and development of seeds.
- I. g. Measure plant growth.

**Respect for
God's creation**

Stewardship

**Awe and
wonder**

2. Uses

- I. a. Discuss the uses of plants.
- I. b. Identify some foods that come from plants.

3. Needs

- I. a. Identify sufficient light/water as conditions that plants need to grow.

II. Physical Science

A. Matter

- I. 1. Properties of Objects
 - I. a. Observe and describe properties of objects.
 - I. b. Compare and contrast objects based on their properties.
 - I. c. Sort and classify objects based on their properties.
- I. 2. States of matter
 - I. a. Identify the three states of matter.
 - I. b. Describe and compare capacities of various containers.
 - I. c. Observe that water takes the shape of its container.
- I. 3. Sink and float
 - I. a. Identify objects that float.
 - I. b. Identify objects that sink.

B. Energy

- I. 1. Magnets
 - I. a. Explain what magnets do.
 - I. b. Demonstrate types of objects that are attracted to magnets.
- I. 2. Light
 - I. a. Identify sources of light.
 - I. b. Demonstrate that light helps to make shadows.
- I. 3. Sound
 - I. a. Identify various sounds.
 - I. b. Observe characteristics of sounds (high/low, soft/loud)

Awe and wonder

Respect for the proper use of physical elements

God's unfolding plan

Natural wonders

Just distribution of resources

III. Earth Science

A. Seasonal Changes

I.

1. Seasons

- a. Identify the four seasons.
- b. Sequence the order of the seasons

I.

2. Weather

- a. Describe weather conditions.
- b. Record weather conditions over a period of time.
- c. Interpret data on a weather chart.
- d. Compare weather to how people dress and activities they might do.

I.

I.

I.

I.

B. Earth Past and Present

1. Rocks and soil

- a. Classify rocks according to size, color, and texture.
- b. Identify components of soil.

I.

I.

2. Dinosaurs

- a. Identify that dinosaurs are extinct.
- b. Identify that people were not alive during time of dinosaurs.
- c. Identify differences among dinosaurs.
- d. Observe, compare, and classify characteristics of dinosaurs.

I.

I.

I.

I.

**Awe and
wonder**

**God's
unfolding plan**

**God's
unfolding plan**

Kindergarten

I. Inquiry

Process skills and inquiries are not an isolated unit of instruction and should be embedded throughout the content areas. Safety issues should be addressed as developmentally appropriate.

A. Process Skills

1. Observe
 - a. Use the senses to gather information about objects or events such as size, shape, color, texture, sound, position, and change (qualitative observations).
2. Classify
 - a. Compare, sort, and group concrete objects according to observable properties.
 - b. Arrange objects in sequential order.
3. Measure
 - a. Use standard (U.S. customary and metric) and nonstandard whole units to estimate and measure mass, length, volume, and temperature (quantitative observations).
4. Communicate
 - a. Use drawings, tables, graphs, written and oral language to describe objects and explain ideas and actions.

B. Inquiry

1. Plan and conduct a simple investigation.
 - a. Ask a question about objects, organisms, and events in the environment that could start an investigation.
 - b. Use simple equipment to gather data and extend the senses.