

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.

I.

I.

I.

I.

I.

##### 1. Seasons

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

##### 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.

**Awe and  
wonder**

**God's  
unfolding plan**

#### B. Earth Past and Present

I.

I.

I.

I.

I.

I.

##### 1. Rocks and soil

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

##### 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.

**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.