I/R/M	THIRD GRADE	Religious Values
	I. Life Science	
	A. Invertebrates	
	1. Invertebrates vs. Vertebrates	**Respect for**
I.	a. Describe the diversity of invertebrate life forms supported by different environments.	**God's creation**
I.	b. Investigate the relationship between the basic needs of invertebrates and whether or not a particular environment meets those needs.	**Awe and wonder**
I.	c. Discuss life cycles of invertebrates.	
	2. Marine invertebrates	
I.	a. Identify and observe marine invertebrates including mollusks, echinoderms, and arthropods.	
I.	b. Identify suitable environments for marine invertebrates.	
I.	c. Explore the variety of body forms of marine invertebrates.	
	3. Terrestrial invertebrates	
I.	a. Identify and observe terrestrial invertebrates including arthropods and annelids.	
I.	b. Identify suitable environments for terrestrial invertebrates.	
I.	c. Explore the variety of body forms of terrestrial invertebrates.	
	B. Habitats and Adaptations	
	1. Variety of habitats	
M.	a. Compare and contrast the basic needs of plants and animals.	**Stewardship**
M.	b. Select and describe an appropriate habitat for a plant or animal.	
	2. Adaptive structures and behaviors	**God's**
I.	a. Investigate and predict how structural adaptations, such as methods of movement, defense, rearing young, camouflage, and mimicry function to allow animals to respond to life needs.	**unfolding plan**
I.	b. Recognize bones, joints, and muscles in the arms and legs of the human body as structural adaptations responsible for movement.	
I.	c. Investigate and predict how physical adaptations, such as seed dispersal, scent, color of flower, and tropism (light and gravity) function to allow plants to respond to life needs.	
	C. Organisms and their environments	
	1. Interdependence of plants and animals	**Stewardship**
R.	a. Investigate and predict ways living things will interact with each other and the environment.	**Awe and**
I.	b. Interpret the interdependency of plants and animals within a food chain by defining the following: producer, consumer, decomposer, herbivore, carnivore, omnivore, predator and prey.	**wonder**
		God's
I.	c. Describe how habitats and organisms change over time due to many influences (effects of natural forces, wind, rain, water, air, sunlight,	**unfolding Plan**

	and temperature).	
I.	d. Research and describe how habitats are managed and species are monitored in South Carolina.	**Moral consciousness**
I.	e. Investigate and describe behavioral adaptations, such as hibernation, migration, and dormancy that allow living things to respond to seasonal conditions.	
I.	f. Investigate and describe that aquatic and terrestrial habitats support a diversity of plants and animals that share limited resources.	
I.	g. Investigate, communicate, and debate that natural events, natural resources and human influences can affect the survival/extinction of a species.	
I.	h. Determine how humans impact natural resources (renewable and nonrenewable).	
	2. Food chain and food web.	
I.	a. Define the following: producer, consumer, decomposer, herbivore, carnivore, omnivore, predator and prey.	
I.	b. Interpret the interdependency of plants and animals within a food chain.	
	D. Plants	
	1. Classifying plants	**Respect for God's creation**
I.	a. Recognize plants as being the basis of life on earth.	
I.	b. Recognize that human and all animal life on earth depend on plants for energy	**Awe and wonder**
I.	c. Identify examples of seed plants including flowering plants and conifers.	

	II. Physical Science	
	A. Simple Machines	
	1. Push and Pull	
R.	a. Define push and pull.	**Awe and**
R.	b. Investigate and describe push and pull involved in simple machines.	**wonder**
	2. Uses and examples of simple machines	
I.	a. Identify and describe simple machines such as lever, pulley, wheel and axle, and inclined plane and apply their uses to real world situation.	
I.	b. Demonstrate how bones, joints and muscles are responsible for human movement and work as levers.	
I.	c. Observe and identify examples of simple machines found in school, playground, home, and work environment.	
I.	d. Observe the motion of simple machines in toys and in playground activities.	
I.	e. Infer how simple machines developed as a result of human needs and exploration.	
	B. Heat and Changes of Matter	
	1. Changing states of Matter	
I.	a. Recognize and explore how matter can be changed in form (solid, liquid, and gas) through processes such as condensation, evaporation, melting, boiling, freezing, and sublimation (solid to gas, such as dry ice) and apply these processes to real world examples.	**God's unfolding plan**
I.	b. Measure, record, and graph the temperature (Celsius and Fahrenheit) of matter as it is heated and cooled.	
I.	c. Compare the unique properties of water with other substances as they are heated and cooled.	
I.	d. Compare the unique properties of water with other substances as they are heated and cooled.	
	2. Effect of Heat	
I.	a. Explore and identify things that produce heat.	
I.	b. Explore and describe how heat moves from one object to another.	**Awe and**
I.	c. Investigate and describe how heat travels by direct contact (conduction) so that a warmer object can warm a cooler object.	**wonder**
I.	d. Investigate and describe what materials can be used to prevent heat from moving from one object to another, such as insulators, and apply to real world examples.	
I.	e. Describe ways to stop a fire from burning.	

	III. Earth Science	
	A. Earth Materials	
	1. Rock cycles	**Awe and**
I.	a. Explain how rocks are formed.	**wonder**
I.	b. Describe how rocks can explain life over time.	
I.	c. List stages in the rock cycle.	**God's**
I.	d. Name the three types of rocks based on their formation.	**unfolding plan**
	2. Water	
I.	a. Recognize that water is vital to all life on earth.	
I.	b. Observe water as being a colorless, odorless, and tasteless liquid.	
I.	c. Observe water as being present in three different states: solid, liquid, and gas.	
I.	d. Observe that water covers approximately 70% of the earth's surface.	
I.	e. Demonstrated that water has surface tension, percolates through soil, and it transpired through plants.	
I.	f. Observe changes that occur in water that has flowed over earth materials.	
I.	g. Conduct activities with a stream table to observe the effects of moving water on landforms.	
I.	h. List ways to clean water so that it can be used again.	
	3. Soil	
I.	a. Define soil as broken down rocks.	
I.	b. Explore soil and its components.	
I.	c. Distinguish between types of soil.	
I.	d. Compare properties of different types of soil.	
	B. Changes in Earth	
	1. Surface Features	
I.	a. Describe surface features of the Earth (mountains, hills, valleys, plateaus, plains, oceans, lakes and rivers).	**God's unfolding plan**
I.	b. Construct and interpret models that illustrate features of the Earth.	
I.	c. Compare some changes in the Earth's surface that are due to slow processes, such as erosion and weathering, with some changes that are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes.	**Just distribution of resources**
I.	d. Infer how human behavior, such s farming, mining, and construction, changes the Earth's surface.	
	2. Natural Events	
I.	a. Predict and explain the consequences of natural events, such as fire, flood, drought, erosion, earthquake, and volcanic eruption.	
I.	b. Explore how technologies are used to help predict some natural	

	events.	
	C. Solar System	
	1. Gravity	**Respect for God's creation**
I.	a. Define gravity as being a force that pulls two objects toward each other.	
I.	b. Explain that the differences in weight are due to differences in the force of gravity.	**Awe and wonder**
I.	c. Compare the weight of an object on earth with that on the moon or other planets.	
I.	d. Demonstrate that the gravity between the earth and the sun keeps the earth revolving around the sun.	
	2. Planets	
I.	a. Name the planets in order.	
I.	b. Explain the relative positions of all the planets.	
I.	c. List characteristics of the planets.	
I.	d. Explain that planets differ in size, characteristics, and composition and that they orbit the sun in our solar system.	

Grade 3

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 two attributes.
   b. Arrange objects in sequential order.

3. Measure
   a. Use standard (U.S. customary and metric) to estimate and measure mass, length, area, perimeter, volume, and temperature to the nearest whole unit (quantitative observations).

4. Communicate
   a. Use drawings, tables, graphs, written and oral language to describe objects and explain ideas and actions.

5. Infer
   a. Explain or interpret an observation based on data and prior knowledge.

6. Predict
   a. Use prior knowledge and observations to identify and explain in advance what will happen.

B. Inquiry

1. Plan and conduct a simple investigation
   a. Ask a question about objects, organisms, and events in the environment.
   b. Plan and conduct a simple investigation that represents a fair test.
   c. Use simple equipment and tools to gather data and extend the senses.
   e. Use data to construct a reasonable explanation.
   f.Communicate investigations and explanations.