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CURRICULUM FRAMEWORKS

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Kindergarten

INQUIRY **1. Ask questions and find answers by scientific investigation.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Demonstrate an understanding of a simple investigation by asking questions. (DOK 2)	*Full Option Science System* **Animals 2x2** Investigation 4, Parts 1-4 **Trees** Investigation 2	*Full Option Science System* **Animals 2x2** Investigation 4, Parts 1-4, pp. 8-23 **Trees** Investigation 2
b. Compare, sort, and group objects according to size, shape, color, and texture. (DOK 2)	*Delta Science Module* **Properties** pp. 5-11 *Full Option Science System* **Trees** Investigation 2	*Delta Science Module* **Properties** Activities 1-4, pp.5-11 *Full Option Science System* **Trees** Investigation 2
c. Identify simple tools (rulers, thermometers, scales, and hand lenses) used to gather information. (DOK 1)	*Delta Science Module* **Properties** Activities 6 -7, Reader pp.6, 9	*Delta Science Module* **Properties** Activities 6-7 pp. 47-60
d. Recognize that people have always had questions about their world and identify science as one way of answering questions and explaining the natural world. (DOK 1)	*Delta Science Module* **Properties** Activity 10-11 *Full Option Science System* **Trees** Investigation 3	*Delta Science Module* **Properties** Activities 10- 11 pp. 75-86 *Full Option Science System* **Trees** Investigation 3
e. Describe ideas using drawings and oral expression. (DOK 2)	*Full Option Science System* **Animals 2x2** Investigations 1 and 3 **Trees** Investigation 3	*Full Option Science System* **Animals 2x2** Investigations 1 pp. 10 -16 Investigation 3, pp.8-12 **Trees** Investigation 3
f. Recognize that when a science investigation is done the	*Full Option Science System*	*Full Option Science System*

way it was done before, very similar results are expected. (DOK 1)	**Animals 2x2** Investigation 1	**Animals 2x2** Investigation 1, pp. 22-25
PHYSICAL SCIENCE **2. Identify properties of objects and materials, position and motion of objects, and properties of magnetism.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Classify properties of objects and materials according to their observable characteristics. (DOK 2) • Materials (e.g., wood, paper, plastic, metal) • Matter (solid or liquid) • Objects that sink or float in water	*Delta Science Module* **Properties** pp.3-13	*Delta Science Module* **Properties** Activities 1-4, pp. 13-39 Activities 7-8, pp. 53-66 Activity 10, pp.75-80
b. Differentiate what happens to water left in an open container (disappears) and water left in a closed container (remains). (DOK 1)	*Delta Science Reader* **Investigating Water** pp.10 – 11 Investigating Water Lesson	**Online Teacher Guide** Investigating Water
c. Compare types of forces and motion. (DOK 1) • External motion of objects (e.g., straight-line, circular, back-and-forth, rotational) • Internal motion of objects (e.g., bending, stretching)	*Delta Science Module* **Properties** Activity 11 *Delta Science Reader* **Where is it? Is it Moving?** pp.9-17	**Online Teacher Guide** Where is it? Is it Moving
d. Compare the interaction between two magnets and the interaction between magnets and other objects (e.g., iron, other metals, wood, water). (DOK 1)	*Delta Science Module* **Properties** Activity 11	*Delta Science Module* **Properties** Activity 11, pp. 81-86
LIFE SCIENCE **3. Understand characteristics, structures, life cycles, and environments of organisms.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Group animals and plants by their physical features (e.g., size, appearance, color). (DOK 2)	*Full Option Science System* **Animals 2x2** Investigations 1, 3, and 4 **Animals 2x2 Reader:** pp. 3-7, 8-11, 13-15, 17-19, 21-24	*Full Option Science System* **Animals 2x2** Investigation 1, pp.26-29 Investigation 3, pp. 17-20 Investigation 4, pp.12-15
b. Compare and contrast physical characteristics of humans. (DOK1) • The five senses (sight, smell, touch, taste, hearing)	*Delta First Science Reader* **About Me**	**Delta Science First Readers Teacher guide** About Me

and corresponding body parts • The six major body organs (brain, skin, heart, lungs, stomach, intestines).		
c. Classify parts of the human body that help it seek, find, and take in food when it feels hunger. (DOK 1) • Eyes and nose for detecting food, Legs to get it • Arms to carry it away, mouth to eat it	*Delta First Science Reader* **About Me** pp. 4-7 About Me Lesson	**Delta Science First Readers** **Teacher guide** About Me
d. Identify offspring that resemble their parents. (DOK 1)	*Full Option Science System* **Animals 2x2** Investigation 5, part 3 www.fossweb.com Activity – "Find the Parent"	*Full Option Science System* **Animals 2x2** Investigation 5, part 3, pp.20-24
e. Recognize and compare the differences between living organisms and non-living materials. (DOK 2)	*Full Option Science System* **Animals 2x2** Investigations 1-5 Science Stories pp.3-23	*Full Option Science System* **Animals 2x2** Investigations 1-5
EARTH AND SPACE SCIENCE **4. Understand properties of Earth materials, objects in the sky, and changes in Earth and sky.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Sort, separate, and classify Earth materials (e.g., clay, silt, sand, pebbles, gravel) using various strategies. (DOK 2)	*Delta Science First Reader* **Earth** pp. 4-6 Classifying Earth Lesson	**Delta Science First Readers** **Teacher guide** Earth
b. Identify and describe properties of Earth materials (soil, rocks, water, and air). (DOK 1)	*Delta Science First Reader* **Earth** pgs 4-6	**Delta Science First Readers** **Teacher guide** Earth
c. Collect and display local weather data. (DOK 2)	*Full Option Science System* **Trees** Investigation 3 *Delta First Science Reader* **Weather** pp. 4-19	*Full Option Science System* **Trees** Investigation 3 Tools for Observing Weather pp. 6-24 **Delta Science First Readers** **Teacher guide** Weather

d. Describe ways to conserve water. (DOK 2)	*Delta Science Reader* **Earth** pp 16-19	**Delta Science First Readers** **Teacher guide** Earth
e. Describe the effects of the sun on living and non-living things. (DOK 1) • Warms the land, air, and water • Helps plants grow	*Full Option Science System* **Trees** Investigation 1	*Full Option Science System* **Trees** Investigation 1 **Online Teacher Guide** Sunshine And Shadows
f. Identify the sun as Earth's source of light and heat and describe changes in shadows over time. (DOK 2)	*Delta First Science Reader* **Sky** pp.5-8,	**Delta Science First Readers** **Teacher guide** Sky

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FIRST GRADE

INQUIRY **1. Understand how to plan and carry out a simple scientific investigation**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Demonstrate an understanding of a simple investigation by asking appropriate questions about objects, organisms, and events. (DOK 2)	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2, parts 1-4	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2, parts 1-4, pp. 8-29
b. Compare, sort, and group objects according to their attributes. (DOK 2)	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2, parts 1-4	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2, parts 1-4, pp. 8-29
c. Use simple tools (e.g., rulers, scales, hand lenses, thermometers, microscopes) to gather information. (DOK 1) • Length, using nonstandard units (e.g., paper clips, Unifix cubes, etc.) and standard units (inches, centimeters) • Weight, using a balance scale with and without nonstandard units • Capacity, using nonstandard units	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2 *Full Option Science System* **Plants and Animals** Investigations 1 & 4	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2, parts 1-4, pp. 8-29 *Full Option Science System* **Plants and Animals** Investigation 1 Investigation 4
d. Match a simple problem to a technological solution related to the problem (e.g., dull pencil – sharpener, bright light – sunglasses, hot room – fan, cold head – hat, heavy baby – stroller). (DOK 1)	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 3	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 3, part 1, pp. 8-11 Investigation 3, part 5, pp. 24-29
e. Use diagrams and written and oral expression to describe ideas or data. (DOK 2)	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2	*Full Option Science System* **Pebbles, Sand & Silt** Investigation 2, parts 1-4, pp.8-29
f. Predict the results of an investigation if it is repeated. (DOK 2)	*Full Option Science System* **Plants & Animals** Investigation 1	*Full Option Science System* **Plants & Animals** Investigation 1

PHYSICAL SCIENCE **2. Develop an understanding of properties of objects and materials, position and motion of objects, and properties of heat and magnetism.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Recognize that most things are made of parts. (DOK 1)	*Full Option Science System* **Balance & Motion** Investigation 2	*Full Option Science System* **Balance & Motion** Investigation 2, parts 1-2, pp. 8-19
b. Describe properties and changes of objects and materials. (DOK 1) • Processes of melting and freezing • How water evaporates and disappears into the atmosphere • How water condenses onto cold surfaces	*Delta Science First Reader* **Matter** pg 12-15 *Delta Science Reader* **Properties** pp 9-11	**Delta Science First Readers** **Teacher guide** Matter **Online Teacher Guide** Properties
c. Describe the effects of various forms of motion and of forces on objects. (DOK 2) • Different forms of motion (sliding, rolling, straight line, circular, back-and-forth) • Effects that motion can produce (spilling, breaking, bending)	*Full Option Science System* **Balance & Motion** Investigations 2 – 3 Science Stories pp.10-29	*Full Option Science System* **Balance & Motion** Investigation 2, parts 1-3, pp.8-25 Investigation 3, parts 1-3, pp.6-25
d. Differentiate between interactions of two magnets and the interaction of a magnet with objects made of iron, other metals, and nonmetals. (DOK 1)	*Delta Science Reader* **Properties** p 7 & 8 Magnetic Attraction Lesson	**Online Teacher Guide** Properties
e. Describe changes in shadows over time and predict how a shadow will look as the light source moves. (DOK 2)	*Delta Science Reader* **Sunshine & Shadows** p.8-9 Changes in Shadow Activity	**Online Teacher Guide** Sunshine & Shadow
f. Compare and classify solids and liquids. (DOK 2)	*Delta First Science Reader* **Matter** pg 9-10 *Delta Science Reader* **Properties** pg 5-11	**Delta Science First Readers** **Teacher guide** Matter **Online Teacher Guide** Properties
g. Identify vibrating objects that produce sound and classify sounds (e.g., high or low pitched, loud or soft). (DOK 1)	*Full Option Science System* **Balance & Motion** Science Stories pp. 32-35	*Full Option Science System* **Balance & Motion** Investigation 3, parts 1-3, pp.6-25

LIFE SCIENCE **3. Understand characteristics, structures, life cycles, and environments of organisms.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Classify animals and plants by observable features (e.g., size, appearance, color, motion, and habitat). (DOK 2)	*Full Option Science System* **Plants & Animals** Investigations 3 & 4 Science Stories **Plants & Animals** pg 21-27 *Delta Science Reader* **From Seed to Plant** pg 12	*Full Option Science System* **Plants & Animals** Investigation 3 pp.128- 140 Investigation 4 pp.157 -164 **Online Teacher Guide** From Seed to Plant
b. Describe the primary function of the major body organs (brain, skin, heart, lungs, stomach, intestines, bones, and muscles).	**My Body Activity**	My Body lesson
c. Communicate the importance of food and explain how the body utilizes food. (DOK 2)	**My Body Activity**	My Body Lesson
d. Chart and compare the growth and changes of animals from birth to adulthood.(DOK 2)	*Full Option Science System* **Plants & Animals** Investigations 3 *Delta Science Reader* **From Seed to Plant**	*Full Option Science System* **Plant & Animals** Investigations 3 p128-133 **Online Teacher Guide** From Seed to Plant
e. Identify the basic needs of plants and animals and recognize that plants and animals both need to take in water, animals need food, and plants need light. (DOK 1)	*Full Option Science System* **Plants & Animals** Investigations 1-4	*Full Option Science System* **Plants & Animals** Investigations 1-4
f. Identify and label the parts of a plant. (DOK 2)	*Full Option Science System* **Plants & Animals** Investigation 1,2 & 4	*Full Option Science System* **Plants & Animals** Investigation 1,2 & 4
EARTH AND SPACE SCIENCE **4. Develop an understanding of the properties of Earth materials, objects in the sky, and changes in Earth and sky.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Compare and classify Earth materials. (DOK 1) • Physical attributes of rocks (e.g., large/small, heavy/light, smooth/rough, hard/crumbly, dark/light, etc.) • Physical attributes of soil (e.g., smell, texture, color, etc.)	*Full Option Science System* **Pebbles, Sand and Silt** Investigations 1,2, and 4 Science Stories, pp. 2-13, 20-23 www.fossweb.com,	*Full Option Science System* **Pebbles, Sand and Silt** Investigation 1, Parts 1-5, pp. 8-29 Investigation 2, Parts 1-4, pp.8-29 Investigation 4, Parts 1-3, pp. 8-25

	Find Earth Materials	
b. Identify Earth landforms and bodies of water (e.g., continents, islands, peninsulas, oceans, rivers, lakes, ponds, creeks). (DOK 1)	*Full Option Science System* **Pebble, Sand and Silt** Science Stories	*Full Option Science System* **Pebbles, Sand and Silt**
c. Observe, identify, record, and graph daily weather conditions. (DOK 3)	*Delta First Science Reader* **Weather** pg 4-8, 17-19	**Delta Science First Readers** **Teacher guide** Weather
d. Categorize types of actions that cause water, air, or land pollution. (DOK 2)	*Full Option Science System* **Pebble, Sand and Silt** Science Stories *Delta First Science Reader* **Weather** pg 4-8, 17-19	*Full Option Science System* **Pebbles, Sand and Silt** **Delta Science First Readers** **Teacher guide** Weather
e. Collect, categorize, and display various ways energy from the sun is used. (DOK 2)	*Delta Science Reader* **From Seed to Plant** p.8 **Sunshine & Shadow** p 2	**Online Teacher Guide** From Seed to Plant Sunshine & Shadow
f. Identify relationships between lights and shadows and illustrate how the shape of the moon changes over time. (DOK 1)	*Delta Science Reader* **Finding the Moon** pg 6-10 **Sunshine & Shadows** pg 2-7	**Online Teacher Guide:** Finding the Moon Sunshine and Shadow
g. Distinguish characteristics of each season and describe how each season merges into the next. (DOK 1)	*Delta First Science Reader* **Weather** pg 9-16	**Delta Science First Readers** **Teacher guide** Weather

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SECOND GRADE

INQUIRY **1. Develop abilities necessary to conduct scientific investigations.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Formulate questions about objects and organisms and predict outcomes in order to conduct a simple investigation. (DOK 2)	*Full Option Science System* **Air and Weather** Investigation 1 **Solids & Liquids** Investigation **Insects & Plants** Investigation	*Full Option Science System* **Air and Weather** Investigation 1, pp. 21-38 **Solids & Liquids** Investigation **Insects & Plants** Investigation
b. Compare, sort, and group objects according to two or more attributes. (DOK 2)	*Full Option Science System* **Solids and Liquids** Investigation 1	*Full Option Science System* **Solids and Liquids** Investigation 1, pp.17-22
c. Use simple tools (e.g., rulers, thermometers, scales, hand lenses, microscopes, balances, clocks) to gather information. (DOK 1) • Length, to the nearest inch, foot, yard, centimeter, and meter • Capacity, to the nearest ounce, cup, pint, quart, gallon, and liter • Weight, to the nearest ounce, pound, gram, and kilogram • Time, to the nearest hour, half-hour, quarter-hour, and five minute intervals (using digital and analog clocks)	*Full Option Science System* **Air and Weather** Investigation 2 **Insects & Plants** Investigation 2 & 4	*Full Option Science System* **Air and Weather** Investigation 2, pp.14-19, 24-27 **Insects & Plants** Investigation 2 & 4
d. Collect and display technological products (e.g., zipper, coat hook, ceiling fan pull chain, can opener, bridge, apple peeler, wheel barrow, nut cracker, etc.) to determine their function. (DOK 1)	*Full Option Science System* **Air and Weather** Investigation 2 & 3	*Full Option Science System* **Air and Weather** Investigation 2, pp. 14-19, 24-27 Investigation 3, pp.12-16
e. Create line graphs, bar graphs, and pictographs to communicate data. (DOK 2)	*Full Option Science System* **Air and Weather** Investigation 4 **Insects & Plants**	*Full Option Science System* **Air and Weather** Investigation 4, pp.8-18 **Insects & Plants**

	Investigation 2 & 4 **Solids & Liquids**	Investigation 2 & 4 **Solids & Liquids**
f. Infer that science investigations generally work the same way in different places. (DOK 2)	*Full Option Science System* **Air and Weather** Investigation 1 **Insects & Plants** Investigation 2 & 4 **Solids & Liquids** Investigation	*Full Option Science System* **Air and Weather** Investigation 1, ppp.21-38 **Insects & Plants** Investigation 2 & 4 **Solids & Liquids** Investigation
PHYSICAL SCIENCE **2. Apply an understanding of properties of objects and materials, position and motion of objects, and properties of magnetism.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Investigate to conclude that when water changes to ice and then melts, the amount of water is the same as it was before freezing. (DOK 2)	*Delta Science Reader* **States of Matter** pg 2-5,8-10	**Online Teacher Guide** States of Matter
b. Investigate and describe properties and changes of matter. (DOK 2) • Unique properties of states of matter (Gases are easily compressed while solids and liquids are not; the shape of a solid is independent of its container; liquids and gases take the shape of their containers.) • Physical changes (e.g., boiling liquids, freezing ice, tearing paper) • Chemical changes (e.g., burning wood, making ice cream, cooking an egg)	*Full Option Science System* **Solids and Liquids** Investigations 1, 2, 4 Science Stories, pp.3-23 www.fossweb.com Activity: Change It	*Full Option Science System* **Solids and Liquids** Investigation 1, pp.8-20 Investigation 2, pp. 10-27 Investigation 4, pp.7-22
c. Describe observable effects of forces, including buoyancy, gravity, and magnetism. (DOK1)	*Full Option Science System* **Air & Weather** Investigation 1 *Delta Science Reader* **Sink & Float** pg 7-9	*Full Option Science System* **Air & Weather** Investigation 1 **Online Teacher Guide** Sink & Float
d. Classify materials that are or are not attracted to magnets and cite examples of useful magnetic tools in everyday living (e.g., can opener, compass, refrigerator door seal). (DOK 2)	www.fossweb.com Magnetism & Electricity *Full Option Science System* **Solids and Liquids** Science Extension	*Full Option Science System* **Solids and Liquids** Investigation 3 Science Extension

	Investigation 3	
e. Recognize that an object can be seen only if either light falls on it or it emits light, and that color is a property of light. (DOK 1)	*Delta Science Reader* **Using Your Senses** pp4-5	**Online Teacher Guide** Using Your Senses
f. Compare and classify solids, liquids, and gasses. (DOK 2)	*Full Option Science System* **Solids and Liquids** Investigation 1 and 2 Science Stories, pp.4-13	*Full Option Science System* **Solids and Liquids** Investigation 1,pp.8-20 Investigation 2, pp.10-27
g. Identify vibration as the source of sound and categorize different types of media (e.g., wood, plastic, water, air, metal, glass) according to how easily vibrations travel. (DOK 2)	*Delta Science Reader* **Using Your Senses** p 6-7	**Online Teacher Guide** Using Your Senses
LIFE SCIENCE **3. Develop and demonstrate an understanding of the characteristics, structures, life cycles, and environments of organisms.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Describe and categorize the characteristics of plants and animals. (DOK 2) • Plant parts (leaves, stems, roots, and flowers) • Animals (vertebrates or invertebrates, cold-blooded or warm-blooded)	*Full Option Science System* **Insects & Plants** Investigations 2 *Delta Science Reader* **Classroom Plants** pg 6-12	*Full Option Science System* **Insects & Plants** Investigations 2 **Online Teacher Guide** Classroom Plants
b. Describe the human body systems with their basic functions and major organs (e.g., brain-nervous, bones-skeletal, muscles-muscular). (DOK 1)	All About My Body Activity	**All About My Body Activity**
c. Identify the cause/effect relationships when basic needs of plants and animals are met and when they are not met. (DOK 1)	*Full Option Science System* **Insects & Plants** Investigation 1 *Delta Science Reader* **Plant & Animal Populations** pg 4-7	*Full Option Science System* **Insects & Plants** Investigation 1 p58,59 **Online Teacher Guide** Plant & Animal Populations
d. Compare the life cycles of plants and animals. (DOK 2)	*Full Option Science System* **Insects & Plants** Investigation 2, 4 & 5 Science Stories pg 35-43	*Full Option Science System* **Insects & Plants** Investigation 2 pg 110 Investigation 4 p192 Investigation 5 p 230
e. Investigate and explain the interdependence of plants and	*Delta Science Reader*	**Online Teacher Guide**

animals. (DOK 2) • Herbivore, carnivore, or omnivore • Predator-prey relationships	**Plant & Animal Populations** pg 8-13 **Soil Science** p 8 & 10	Plant & Animal Populations Soil Science
EARTH AND SPACE SCIENCE **4. Develop an understanding of the properties of Earth materials, objects in the sky, and changes in Earth and sky.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Categorize different types of Earth materials, (e.g., rocks, minerals, soils, water, atmospheric gases). (DOK 2)	*Delta Science Reader* **Soil Science** p. 2,3,7&8	**Online Teacher Guide** Soil Science
b. Describe the three layers of the Earth. (DOK 1)	Layers of the Earth Activity	Soil Science
c. Collect, organize, and graph weather data obtained by using simple weather instruments (wind vane, rain gauge, thermometer) and explain the components of the water cycle. (DOK 2)	*Full Option Science System* **Air and Weather** Investigations 2 and 4	*Full Option Science System* **Air and Weather** Investigation 2, pp. 8-27 Investigation 4, pp. 8-18
d. Distinguish how actions or events related to the Earth's environment may be harmful or helpful. (DOK 2)	*Delta Science Reader* **Soil Science** pg 4-7, 9	**Online Teacher Guide** Soil Science
e. Model and explain the concept of Earth's rotation as it relates to day and night and infer why it is usually cooler at night than in the day. (DOK 2)	*Full Option Science System* **Air & Weather** Investigation 4	*Full Option Science System* **Air & Weather** Investigation 4
f. Describe characteristics and effects of objects in the universe. (DOK 1) • Position of the sun in relation to a fixed object on Earth at various times(day and night) • The major characteristics of planets (revolution and rotation periods, size, number of moons) • Changes in the appearance of the moon	*Full Option Science System* **Air & Weather** Investigation 4	*Full Option Science System* **Air & Weather** Investigation 4

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THIRD GRADE

INQUIRY **1. Apply concepts involved in a scientific investigation**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Identify questions and predict outcomes that can be examined through scientific investigations. (DOK 3)	*Full Option Science System* **Matter and Energy** Investigation 2	*Full Option Science System* **Matter and Energy** Investigation 2 pg 96-110
b. Describe familiar objects and events using the senses to collect qualitative (e.g., color, size, shape) information. (DOK 1)	*Full Option Science System* **Matter and Energy** Investigation 2	*Full Option Science System* **Matter and Energy** Investigation 2, ppp.93-114
c. Select and use simple tools (e.g., rulers, thermometers, scales, hand lenses, microscopes, calculators, balances, clocks) to gather information. (DOK 1) • Length, to the nearest half of an inch, foot, yard, centimeter, and meter • Capacity and weight/mass, in English and metric systems • Time, to the nearest minute • Temperature, to the nearest degree	*Delta Science Module* **Weather Instruments** Activity 1-3, 11 *Full Option Science System* **Matter and Energy** Investigations 3 and 4	*Delta Science Module* **Weather Instruments** Activity 1-3, 11, pp. 13-36, 89-96 *Full Option Science System* **Matter and Energy** Investigation 3, pp.139-160 Investigation 4, pp.174-180
d. Draw conclusions and communicate the results of an investigation. (DOK 2)	*Full Option Science System* **Matter and Energy** Investigation 2	*Full Option Science System* **Matter and Energy** Investigation 2 pg 99
e. Communicate data by creating diagrams, charts, tables, and graphs. (DOK 2)	*Delta Science Module* **Weather Instruments** Activity 1 & 6	*Delta Science Module* **Weather Instruments** Activity 1 & 6
f. Ask questions and seek answers to explain why different results sometimes occur in repeated investigations. (DOK 2)	*Full Option Science System* **Matter and Energy** Investigation 2 Investigation 3	*Full Option Science System* **Matter and Energy** Investigation 2 pg 99 Investigation 3 pg 146

PHYSICAL SCIENCE **2. Explain concepts related to objects and materials, position and motion of objects, and properties of magnetism.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Investigate to conclude that the weight of an object is always the sum of its parts, regardless of how it is assembled, (e.g., Lego creation/separate blocks, bucket/cups of sand, roll/stacks of pennies, bag/individual potatoes, etc.) (DOK 2)	*Full Option Science System* **Matter and Energy** Investigation 3	*Full Option Science System* **Matter and Energy** Investigation 3 pg 129- 137 Investigation 4 Science Extension
b. Explore and identify physical changes of matter, including melting, freezing, boiling, evaporation, and condensation, (DOK 2)	*Full Option Science System* **Matter and Energy** Investigation 4 Science Resources, pp.54-56	*Full Option Science System* **Matter and Energy** Investigation 4, pp. 181-192
c. Investigate and describe forces affecting motion in simple machines (lever, wheel and axle, block and tackle, inclined plane, screw.) (DOK 2)	Delta Science Content Reader **Work & Machine** pp. 10-19	**Online Teacher Guide** Work & Machine
d. Differentiate between potential and kinetic energy and recognize their conversions. (DOK 2) • Potential to kinetic (e.g., winding a clock/clock begins ticking) • Kinetic to potential (e.g., roller coaster moving downward/upward to the top of the hill)	*Full Option Science System* **Matter and Energy** Investigation 1 Science Resources, pp. 2-13	*Full Option Science System* **Matter and Energy** Investigation 1, pp. 50-82
e. Explain how light waves travel (e.g., in a straight line until they strike an object, through transparent and translucent objects, from reflecting and refracting surfaces, at the surface of opaque objects). (DOK 1)	*Full Option Science System* **Matter and Energy** Investigation 2 Science Resources, pp.24-27, 34-35	*Full Option Science System* **Matter and Energy** Investigation 2, pp.93-102
f. Differentiate the movement of vibrations in waves (e.g., sound and seismic waves), and cite examples to explain that vibrations move through different materials at different speeds. (DOK 1)	*Delta Science Reader* **Sound Energy**	**Online Teacher Guide** Sound Energy
g. Cite evidence to explain why heating or cooling may change the properties of materials (e.g., boiling an egg, evaporating water, chilling gelatin, making ice cream, etc.)	*Full Option Science System* **Matter and Energy** Investigation 4	*Full Option Science System* **Matter and Energy** Investigation 4, pp.181-192

(DOK 2)	Science Resources, pp. 54-59	
LIFE SCIENCE **3. Describe the characteristics, structures, life cycles, and environments of organisms.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Research and explain diverse life forms (including vertebrates and invertebrates) that live in different environments (e.g., deserts, tundras, forests, grasslands, taigas, wetlands) and the structures that serve different functions in their survival (e.g., methods of movement, defense, camouflage). (DOK 2)	*Full Option Science System* **Structures of Life** Investigations 3 and 4 Science Stories, pp.4-5, 17-34 www.fossweb.com *Delta Science Content Reader* **Cells & Classification** pg 12-19 **Animal Needs & Life Cycles** pg 4-17	*Full Option Science System* **Structures of Life** Investigation 3, pp. 8-15 Investigation 4, pp.8-13 **Online Teacher Guide** Cells & Classification Animal Needs & Life Cycles
b. Identify and describe the purpose of the digestive, nervous, skeletal, and muscular systems of the body. (DOK 1)	*Delta Science Content Reader* **Human Body Systems** pg 7-22	**Online Teacher Guide** Human Body Systems
c. Investigate the relationships between the basic needs of different organisms and discern how adaptations enable an organism to survive in a particular environment. (DOK 2)	*Full Option Science System* **Structures of Life** Investigation 3 and 4 *Delta Science Content Reader* **Ecosystems** pg 9-15 **Animal Needs & Life Cycles** pg 11-17	*Full Option Science System* **Structures of Life** Investigation 3 Investigation 4 **Online Teacher Guide** Ecosystems Animal Needs & Life Cycles
d. Illustrate how the adult animal will look, when given pictures of young animals (e.g., birds, fish, cats, frogs, caterpillars, etc.) (DOK 2)	*Full Option Science System* **Structures of Life** Science Stories, p. 20 www.fossweb.com Activity: Life Cycles *Delta Science Content Reader* **Animal Needs & Life Cycles** pg 18-22	*Full Option Science System* **Structures of Life** Investigation 3 **Online Teacher Guide** Animal Needs & Life Cycles
e. Recall that organisms can survive only when in environments (deserts, tundras, forests, grasslands, taigas, wetlands) in which their needs are met and interpret the interdependency of plants and animals within a food chain, including producer, consumer, decomposer, herbivore,	*Full Option Science System* **Structures of Life** Science Stories, pp. 17-34, 43 *Delta Science Content Reader*	*Full Option Science System* **Structures of Life** Investigation 3 **Online Teacher Guide**

carnivore, omnivore, predator, and prey. (DOK 2)	**Ecosystems** pg 8-15	Ecosystems
f. Recognize that cells vary greatly in size, structure, and function, and that some cells and tiny organisms can be seen only with a microscope. (DOK 1)	*Delta Science Content Reader* **Cells & Classification** pg 7-11	**Online Teacher Guide** Cells & Classification
EARTH AND SPACE SCIENCE **4. Develop an understanding of the properties of Earth materials, objects in the sky, and changes in Earth and sky.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Recall that soil is made up of various materials (weathered rock, minerals, plant and animal remains, living organisms.) (DOK 1)	*Delta Science Content Reader* **Soils** pg 13-15	**Online Teacher Guide** Soils
b. Compare and contrast changes in the Earth's surface that are due to slow processes (erosion, weathering, mountain building) and rapid processes (landslides, volcanic eruptions, earthquakes, floods, asteroid collisions).(DOK 2)	*Delta Science Module* **Earth Movements** Activities 9-12 Reader pp. 6-12	*Delta Science Module* **Earth Movements** Activities 9-12, pp. 79-110
c. Gather and display local weather information such as temperature, precipitation, clouds, etc., on graphs and use graphs of weather patterns to predict weather conditions. (DOK 3) • Instruments (wind vane, rain gauge, thermometers, anemometers, and barometers) • Cloud types (cirrus, stratus, cumulus) • Water cycle (evaporation, precipitation, condensation)	*Delta Science Module* **Weather Instruments** Activities 1-6, 8-12 Reader pp.3-9	*Delta Science Module* **Weather Instruments** Activities 1-6, pp. 13-57 Activities 8-12, pp.67-101
d. Identify the causes and effects of various types of air, land, and water pollution and infer ways to protect the environment. (DOK 3)	*Delta Science Content Reader* **Changes in Ecosystems** pg 11-23	**Online Teacher Guide** Changes in Ecosystems
e. Identify patterns in the phases of the moon, describe their sequence, and predict the next phase viewed in the night sky. (DOK 1)	*Delta Science Content Reader* **Earth, Moon and Sun System,** p.18-19	**Online Teacher Guide** Earth, Moon and Sun System
f. Describe the different components of the solar system (sun, planets, moon, asteroids, comets.) (DOK 1) • Gravitational attraction of the sun • Phases of the moon • Constellations	*Delta Science Content Reader* **Earth, Moon and Sun System,** p.18-19 *Delta Science Reader* **Solar System (red)**	**Online Teacher Guide** Earth, Moon and Sun System Solar System
g. Explain how fossil records are used to learn about the past, identify characteristics of selected fossils, and describe why	*Full Option Science System* **Structures of Life**	**Online Teacher Guide** Changes in Ecosystems

they may be found in many places. (DOK 2) • The Earth Science Museum at the Petrified Forest in Flora, MS • The Natural Science Museum in Jackson, MS	Science Stories,p.45-48 *Delta Science Content Reader* **Changes in Ecosystems** pg 17-19	

CORRELATION TO THE MISSISSIPPI CURRICULUM FRAMEWORKS

FOURTH GRADE

INQUIRY **1. Explain and use skills necessary to conduct scientific inquiry.**		
Objectives	***Pupil Edition*** ***Page References***	***Teacher Edition*** ***Page References***
a. Form hypotheses and predict outcomes of problems to be investigated. (DOK 3)	*Full Option Science System* **Magnetism & Electricity** Investigation 4	*Full Option Science System* **Magnetism & Electricity** Investigation 4, pp. 14-22
b. Use the senses and simple tools to gather qualitative information about objects or events (size, shape, color, texture, sound, position, change). (DOK 1)	*Full Option Science System* **Physics of Sound** Investigation 4	*Full Option Science System* **Physics of Sound** Investigation 4, pp.8-19
c. Demonstrate the accurate use of simple tools to gather and compare information (DOK 1) • Tools (English rulers [to the nearest eighth of an inch], metric rulers [to the nearest centimeter], thermometers, scales, hand lenses, microscopes, balances, clocks, calculators, anemometers, rain gauges) • Types of data (height, mass/weight, temperature, length, distance, volume, area, perimeter)	**Food Chains & Webs** Activity 2 Activity 6 *Full Option Science System* **Physics of Sound** Investigation 2	**Food Chains and Webs** Activity 2 pg 23-30 Activity 6 pg 53-55 *Full Option Science System* **Physics of Sound** Investigation 2, pp.8-19
d. Use simple sketches, diagrams, tables, charts, and writing to draw conclusions and communicate data results. (DOK 2)	*Full Option Science System* **Magnetism & Electricity** Investigation 2	*Full Option Science System* **Magnetism & Electricity** Investigation 2, pp.8-19
e. Interpret and describe patterns of data using drawings, diagrams, charts, tables, graphs, and maps. (DOK 2)	*Full Option Science System* **Magnetism & Electricity** Investigation 1 **Sun Moon & Stars** Investigation 2	*Full Option Science System* **Magnetism & Electricity** Investigation 1, pp. 23-29 **Sun Moon & Stars** Investigation 2, pp 89-100
f. Explain why scientists and engineers often work in teams with different individuals doing different things that contribute to the results. (DOK 2)	*Full Option Science System* **Magnetism & Electricity** Science Stories, p. 16-20 *Delta Science Reader* **Weather Instruments** pg 12	*Full Option Science System* **Magnetism & Electricity** Science Stories, p. 16-20 **Science Literacy Teacher Guide: Physical Science** Weather Instruments Teacher

		Guide
g. Draw conclusions about important steps (e.g., making observations, asking questions, trying to solve a problem, etc.) that led to inventions and discoveries. (DOK 3)	*Full Option Science System* **Magnetism & Electricity** Investigation 4	*Full Option Science System* **Magnetism & Electricity** Investigation 4, pp.14-22
PHYSICAL SCIENCE **2. Use the properties of objects and materials, position and motion of objects, and transfer of energy to develop an understanding of physical science concepts.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Recognize that materials may be composed of parts that are too small to be seen without magnification. (DOK 1)	*Delta Science Content Reader* **Properties of Matter** pg 816	**Online Teacher Guide** Properties of Matter
b. Distinguish between physical and chemical changes and between objects composed of a single substance from those composed of more than one substance. (DOK 2)	*Delta Science Content Reader* **Properties of Matter** pg 4-13	**Online Teacher Guide** Properties of Matter
c. Determine the causes and effects of forces on motion. (DOK 2) • Force exerted over a distance causes work to be done and that the result (work) is the product of force and distance • Friction on moving objects and actions that increase or decrease friction • Momentum and inertia	*Delta Science Content Reader* **Forces & Motion** pg 3-17 **Science in a Nutshell** **Energy & Motion**	**Online Teacher Guide** Forces & Motion
d. Explain how energy flowing through an electrical circuit can be converted from electrical energy to light, sound, or heat energy. (DOK1) • Parts of an electric circuit and resulting actions when circuits are opened or closed • Construction and uses of electromagnets • Energy transferred through an electrical circuit to a bulb or bell to its surroundings as light, sound, and heat (thermal) energy	*Full Option Science System* **Magnetism & Electricity** Investigations 2-5 Science Stories, pp. 28-33	*Full Option Science System* **Magnetism & Electricity** Investigation 2, pp. 8-29 Investigation 3, pp. 10-26 Investigation 4, pp. 8-22 Investigation 5, pp. 8-20
e. Describe how light behaves (travels in a straight line, is absorbed, reflected, refracted, or appears transparent or translucent). (DOK 1)	*Delta Science Content Reader* **Heat & Light Energy** pg 3-17	**Online Teacher Guide** Heat & Light Energy
f. Investigate and draw conclusions about the relationship	*Full Option Science System*	*Full Option Science System*

between the rate of vibrating objects and the pitch of the sound. (DOK 3)	**Physics of Sound** Investigation 2 Science Stories pp. 11-13	**Physics of Sound** Investigation 2, pp.8-24
g. Describe how heat flows from a warm object to a cold one and categorize examples of materials that may or may not be used as insulators. (DOK 2)	*Delta Science Content Reader* **Heat & Light Energy** pg 4-9	**Online Teacher Guide** Heat & Light Energy
LIFE SCIENCE **3. Analyze the characteristics, structures, life cycles, and environments of organisms.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Describe the cause and effect relationships that explain the diversity and evolution of organisms over time. (DOK 2) • Observable traits due to inherited or environmental adaptations • Variations in environment (over time and from place to place) • Variations in species as exemplified by fossils • Extinction of a species due to insufficient adaptive capability in the face of environmental changes	*Delta Science Content Reader* **Heredity** pg 3-23	**Online Teacher Guide** Heredity
b. Classify the organs and functions of the nervous, circulatory, and respiratory systems of the body. (DOK 1)	*Delta Science Content Reader* **Human Body Systems** pg 3-23	**Online Teacher Guide** Human Body Systems
c. Compare characteristics of organisms, including growth and development, reproduction, acquisition and use of energy, and response to the environment. (DOK 2) • Life cycles of various animals to include complete and incomplete metamorphosis • Plant or animal structures that serve different functions in growth, adaptation, and survival • Photosynthesis	**Food Chains and Webs** Activities 2-6 Reader pp. 4-5	**Food Chains and Webs** Activities 2-6, pp. 23-58
d. Distinguish the parts of plants as they relate to sexual reproduction and explain the effects of various actions on the pollination process (e.g., wind, water, insects, adaptations of flowering plants, negative impacts of pesticides). (DOK 2)	**Delta Science Content Reader** **Plant Life Cycles pg 7-15**	**Online Teacher Guide** Plant Life Cycles
e. Analyze food webs to interpret how energy flows from the sun. (DOK 2)	**Food Chains and Webs** Activities 3-12	**Food Chains and Webs** Activities 3-12, pp. 31-101

	Reader, pp. 6-9	
f. Describe the structural and functional relationships among the cells of an organism. (DOK 2) • Benefit from cooperating • Vary greatly in appearance • Perform very different roles	*Delta Science Content Reader* **Cell & Classification** pg 7-11	**Online Teacher Guide** Cells & Classification
EARTH AND SPACE SCIENCE **4. Develop an understanding of the properties of Earth materials, objects in the sky, and changes in Earth and sky.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Classify sedimentary, metamorphic, and igneous rocks. (DOK 2)	*Delta Science Content Reader* **Minerals, Rocks and Fossils**	**Online Teacher Guide** Minerals, Rocks and Fossils
b. Compare and contrast Earth's geological features and the changes caused by external forces. (DOK 2) • Bodies of water, beaches, ocean ridges, continental shelves, plateaus, faults, canyons, sand dunes, and ice caps • External forces including heat, wind, and water • Movement of continental plates	*Delta Science Reader* **Earth Movements** pg 4-12	**Online Teacher Guide** Earth Movements
c. Investigate, record, analyze and predict weather by observing, measuring with simple weather instruments (thermometer, anemometer, wind vane, rain gauge, barometer and hygrometer), recording weather data (temperature, precipitation, sky conditions, and weather events), and using past patterns to predict future patterns. (DOK 2)	*Delta Science Reader* **Weather Instruments** pg 2-10	**Online Teacher Guide** Weather Instruments
d. Describe how human activities have decreased the capacity of the environment to support some life forms. (DOK 2) • Reducing the amount of forest cover • Increasing the amount of chemicals released into the atmosphere • Farming intensively	**Food Chains and Webs** Activity 12, Science, Technology and Society Reader, p. 12	**Food Chains and Webs** Activity 12, Science Technology and Society p. 101
e. Compare and contrast the seasons and explain why seasons vary at different locations on Earth. (DOK 2)	*Full Option Science System* **Sun, Moon and Stars** Investigation 1 Science Resources, pp. 4-8	*Full Option Science System* **Sun, Moon and Stars** Investigation 1 pg 33-64

f. Describe objects in the universe including their movement. (DOK 2) • Physical features of the moon (craters, plains, mountains) • Appearance and movement of Earth and its moon (e.g., waxing/waning of the moon and lunar/solar eclipses) • Why a planet can be seen in different constellations (locations) at different times	*Full Option Science System* **Sun, Moon and Stars** Investigations 2 & 3 Science Resources, pp.1-8, 14-17, 19-32, 35-37	*Full Option Science System* **Sun, Moon and Stars** Investigation 2, pp.79-100 Investigation 3, pp.114-130
g. Summarize the process that results in deposits of fossil fuels and conclude why fossil fuels are classified as nonrenewable resources. (DOK 2)	*Delta Science Reader* **Energy** p. 22	**Online Teacher Guide** Energy

CORRELATION TO THE MISSISSIPPI CURRICULUM FRAMEWORKS

FIFTH GRADE

INQUIRY **1. Develop and demonstrate an understanding of scientific inquiry using process skills.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Form a hypothesis, predict outcomes, and conduct a fair investigation that includes manipulating variables and using experimental controls. (DOK 3)	*Full Option Science System* **Variables** Investigation 3	*Full Option Science System* **Variables** Investigation 3, pp. 14-23
b. Distinguish between observations and inferences. (DOK 2)	*Full Option Science System* **Mixtures and Solutions** Investigation 3	*Full Option Science System* **Mixtures and Solutions** Investigation 3, pp. 8-24
c. Use precise measurement in conjunction with simple tools and technology to perform tests and collect data. (DOK 1) • Tools (English rulers [to the nearest one-sixteenth of an inch], metric rulers [to the nearest millimeter], thermometers, scales, hand lenses, microscopes, balances, clocks, calculators, anemometers, rain gauges, barometers, hygrometers) • Types of data (height, mass, volume, temperature, length, time, distance, volume, perimeter, area)	*Full Option Science System* **Mixtures and Solutions** Investigation 1	*Full Option Science System* **Mixtures and Solutions** Investigation 1, pp.16-20
d. Organize and interpret data in tables and graphs to construct explanations and draw conclusions. (DOK 2)	*Full Option Science System* **Variables** Investigations 1 & 3	*Full Option Science System* **Variables** Investigation 1, pp.23-27 Investigation 3, pp.24-27
e. Use drawings, tables, graphs, and written and oral language to describe objects and explain ideas and actions. (DOK 2)	*Full Option Science System* **Water Planet** Investigation 3 **Living Systems** Investigation 2	*Full Option Science System* **Water Planet** Investigation 3 pp. 125-135 **Living Systems** Investigation 2, pp. 85-98
f. Make and compare different proposals when designing a solution or product. (DOK 2)	*Full Option Science System* **Variables** Investigation 4	*Full Option Science System* **Variables** Investigation 4, pp. 18-23
g. Evaluate results of different data (whether trivial or	*Full Option Science System*	*Full Option Science System*

significant). (DOK 2)	**Living Systems** Investigation 2	**Living Systems** Investigation 2, Part 1, pp. 85-98
h. Infer and describe alternate explanations and predictions. (DOK 3)	*Full Option Science System* **Mixtures and Solutions** Investigation 4 **Water Planet** Investigation 3	*Full Option Science System* **Mixtures and Solutions** Investigation 4, pp. 8-24 **Water Planet** Investigation 3, pp. 136-144
PHYSICAL SCIENCE **2. Understand relationships of the properties of objects and materials, position and motion of objects, and transfer of energy to explain the physical world.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Determine how the properties of an object affect how it acts and interacts. (DOK 2)	*Full Option Science System* **Mixtures and Solutions** Investigation 1 Investigation 2 Investigation 4 Science Stories, pp. 1-3, 23-24, 28, 37-42	*Full Option Science System* **Mixtures and Solutions** Investigation 1, pp. 8-29 Investigation 2, pp. 8-20 Investigation 4, pp. 8-24
b. Differentiate between elements, compounds, and mixtures and between chemical and physical changes (e.g., gas evolves, color, and/or temperature changes). (DOK 2)	*Full Option Science System* **Mixtures and Solutions** Investigation 1 Investigation 4 Science Stories, pp. 1-6, 23-28	*Full Option Science System* **Mixtures and Solutions** Investigation 1, pp. 8-29 Investigation 4, pp. 8-24
c. Investigate the motion of an object in terms of its position, direction of motion, and speed. (DOK 2) • The relative positions and movements of objects using points of reference (distance vs. time of moving objects) • Force required to move an object using appropriate devices (e.g., spring scale) • Variables that affect speed (e.g., ramp height/length/surface, mass of object) • Effects of an unbalanced force on an object's motion in terms of speed and direction	*Full Option Science System* **Variables** Investigation 1, 3, and 4	*Full Option Science System* **Variables** Investigation 1, pp. 8-23 Investigation 3, , pp. 8-27 Investigation 4, pp. 8-23
d. Categorize examples of potential energy as gravitational (e.g., boulder on a hill, child on a slide), elastic (e.g., compressed spring, slingshot, rubber band), or chemical (e.g.	*Full Option Science System* **Variables** Investigations 1, 3 and 4	*Full Option Science System* **Variables** Investigation 1, pp. 8-23

unlit match, food). (DOK 2)	Delta Science Content Reader: **Energy p.15**	Investigation 3, pp.8-23 Investigation 4, pp. 8-23
e. Differentiate between the properties of light as reflection, refraction, and absorption. (DOK 1) • Image reflected by a plane mirror and a curved-surfaced mirror • Light passing through air or water • Optical tools such as prisms, lenses, mirrors, and eyeglasses	*Delta Science Reader:* **Color and Light** p. 1-7	**Online Teacher Guide** Color & Light
f. Describe physical properties of matter (e.g., mass, density, boiling point, freezing point) including mixtures and solutions. (DOK 1) • Filtration, sifting, magnetism, evaporation, and flotation • Mass, density, boiling point, and freezing point of matter • Effects of temperature changes on the solubility of substances	*Full Option Science System* **Mixtures and Solutions** Investigations 1 & 2 Science Stories, pp. 18-19, 42	*Full Option Science System* **Mixtures and Solutions** Investigation 1 pp.8-29 Investigation 2 pp. 6-28
g. Categorize materials as conductors or insulators and discuss their real life applications (e.g., building construction, clothing, and animal covering). (DOK 2)	*Delta Science Content Reader:* **Electricity & Magnetism**	**Online Teacher Guide** Electricity & Magnetism
LIFE SCIENCE **3. Predict characteristics, structures, life cycles, environments, evolution, and diversity of organisms.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Compare and contrast the diversity of organisms due to adaptations to show how organisms have evolved as a result of environmental changes. (DOK 2) • Diversity based on kingdoms, phyla, and classes (e.g., internal/external structure, body temperature, size, shape) • Adaptations that increase an organism's chances to survive and reproduce in a particular habitat (e.g., cacti needles/leaves, fur/scales) • Evidence of fossils as indicators of how life and environmental conditions have changed	*Full Option Science System* **Living Systems** Investigation 2 Science Resources: pp. 21-25 *Delta Science Content Reader:* **Heredity** p. 21-23 **Changes in Ecosystems** pg 17-19	*Full Option Science System* **Living Systems** Investigation 2, pp.99-106 **Online Teacher Guide** Heredity Changes in Ecosystems
b. Research and classify the organization of living things. (DOK 2) • Differences between plant and animal cells • Function of the major parts of body systems (nervous,	*Full Option Science System* **Living Systems** Investigations 1 and 2 Science Resources p. 1-3, 51-59	*Full Option Science System* **Living Systems** Investigation 1, pp.51-59 Investigation 2, pp.85-106

circulatory, respiratory, digestive, skeletal, muscular) and the ways they support one another • Examples of organisms as single-celled or multi-celled		
c. Research and cite evidence of the work of scientists (e.g., Pasteur, Fleming, Salk) as it contributed to the discovery and prevention of disease. (DOK 3)	*Delta Science Reader*: **You & Your Body** p.12	**Online Teacher Guide** You & Your Body
d. Distinguish between asexual and sexual reproduction. (DOK 1) • Asexual reproduction processes in plants and fungi (e.g., vegetative propagation in stems, roots, and leaves of plants, budding in yeasts, fruiting bodies in fungi) • Asexual cell division (mushroom spores produced/dispersed) • Sexual reproduction (e.g., eggs, seeds, fruit)	*Delta Science Content Reader:* **Heredity p. 12-13** **Plant Life Cycles**	**Online Teacher Guide** Heredity Plant Life Cycles
e. Give examples of how consumers and producers (carnivores, herbivores, omnivores, and decomposers) are related in food chains and food webs. (DOK 1)	*Delta Science Content Reader:* **Ecosystems** p. 20	**Online Teacher Guide** Ecosystems
EARTH AND SPACE SCIENCE **4. Develop an understanding of the properties of Earth materials, objects in the sky, and changes in Earth and sky.**		
Objectives	***Pupil Edition Page References***	***Teacher Edition Page References***
a. Categorize Earth's materials. (DOK 1) • Rocks, minerals, soils, water, and atmospheric gases • Layers of the atmosphere, hydrosphere, and lithosphere	*Full Option Science System* **Water Planet** Investigation 4 Science Resources, pp. 63-66	*Full Option Science System* **Water Planet** Investigation 4, pp.212-216
b. Explain how surface features caused by constructive processes (e.g., depositions, volcanic eruptions, earthquakes) differ from destructive processes (e.g., erosion, weathering, impact of organisms). (DOK 2)	*Delta Science Content Reader*: **Changes in Ecosystems,** pp. 9-11	**Online Teacher Guide** Changes in Ecosystems
c. Summarize how weather changes. (DOK 2) • Weather changes from day to day and over the seasons • Tools by which weather is observed, recorded, and predicted	*Full Option Science System* **Water Planet** Investigation 4 Science Resources, pp. 67-88	*Full Option Science System* **Water Planet** Investigation 4, pp.184-211
d. Describe changes caused by humans on the environment and natural resources and cite evidence from research of ways to conserve natural resources in the United States,	*Delta Science Content Reader*: **Changes in Ecosystems p 11-12**	**Online Teacher Guide** Changes in Ecosystems

including (but not limited to) Mississippi. Examples of Mississippi efforts include the following: (DOK 2) • Associated Physics of America, a private company located in Greenwood Mississippi, develops ways to convert a variety of agricultural products into efficient, environment-friendly and cost-effective energy sources. • The Natural Resource Enterprises (NRE) Program of the Department of Wildlife and Fisheries and the Cooperative Extension Service at MSU educate landowners in the Southeast about sustainable natural resource enterprises and compatible habitat management practices. • The Engineer Research and Development Center of the Vicksburg District of the U.S. Army Corps of Engineers provides quality engineering and other professional products and services to develop and manage the Nation's water resources, reduce flood damage, and protect the environment.		
e. Predict the movement patterns of the sun, moon, and Earth over a specified time period. (DOK 1)	*Full Option Science System* **Water Planet** Investigation 1 *Delta Science Content Reader:* **Earth, Moon, Sun System** **Pollution**	*Full Option Science System* **Water Planet** Investigation 1, pp. 50-58 **Online Teacher Guide** Earth, Moon, Sun System Pollution
f. Compare and contrast the physical characteristics of the planets (e.g., mass, surface gravity, distance from the sun, surface characteristics, moons). (DOK 2)	*Full Option Science System* **Water Planet** Investigation 1 Science Resources, pp. 1-13	*Full Option Science System* **Water Planet** Investigation 1, pp. 50-58
g. Conclude that the supply of many Earth resources (e.g., fuels, metals, fresh water, farmland) is limited and critique a plan to extend the use of Earth's resources (e.g., recycling, reuse, renewal). (DOK 3)	*Full Option Science System* **Water Planet** Science Resources pp. 63-66 *Delta Science Content Reader:* **Pollution** pg 2-13	*Full Option Science System* **Water Planet** Science Resources pp. 63-66 **Online Teacher Guide** Pollution Teacher Guide