

Kindergarten Year at a Glance

1 st Nine Weeks	2 nd Nine Weeks	3 rd 9 weeks	4 th Nine Weeks
<p>Nature of Science</p> <p>Unit 1 (5 lessons)</p> <p><u>Big Idea 1:</u> The Practice of Science <u>Big Idea 8:</u> Matter</p> <p><u>Big Idea 14:</u> Organization and Development of Living Organisms</p> <p>SC.K.N.1.1 – Collaborate with a partner to collect information</p> <p>SC.K.N.1.2 – Make observations about the natural world using the 5 senses</p> <p>SC.K.N.1.3 – Keep record of investigations</p> <p>SC.K.N.1.4 – Create visual representations of an object with labeling</p> <p>SC.K.N.1.5 – Understand that learning comes from careful observation</p> <p>SC.K.P.8.1 – Observe properties such as size, shape, temperature, weight and texture</p> <p>SC.K.L.14.1 Recognize the 5 senses and the related body parts</p>	<p>Life Science</p> <p>Unit 2 (5 lessons) <u>Big Idea 14:</u> Organization and Development of Living Organisms</p> <p>SC.K.L.14.2 – Recognize that some books and other media outlets portray animals and plants in nonrealistic ways.</p> <p>SC.K.L.14.3 –Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do. Introduce comparing and contrasting plants and animals by observable physical characteristics and behaviors. Provide students with opportunities to make observations in classrooms and schoolyard environments.</p> <p>Unit 3 (4 lessons) <u>Big Idea 14:</u> Organization and Development of Living Organisms</p> <p>SC.K.L.14.3 –Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do. Introduce comparing and contrasting plants and animals by observable physical characteristics and behaviors. Provide students with opportunities to make observations in classrooms and schoolyard environments.</p>	<p>Earth and Space</p> <p>Unit 4 (2 lessons)</p> <p><u>Big Idea 5:</u> Earth in Space and Time</p> <p>SC.K.E.5.1 – Law of Gravity</p> <p>SC.K.E.5.2 – Repeating patterns of day and night</p> <p>SC.K.E.5.3 – The sun can only be seen during the daytime</p> <p>SC.K.E.5.4 – The moon can be seen at night and sometimes during the day</p> <p>SC.K.E.5.5 – Observe that things can be big, small based on observable distance from Earth</p> <p>SC.K.E.5.6 – Observe that objects are far away and near by</p>	<p>Physical Science</p> <p>Unit 5- (3 lessons) <u>Big Idea 8:</u> Matter <u>Big Idea 9:</u> Changes in Matter</p> <p>SC.K.P.8.1 – Observe properties such as size, shape, temperature, weight and texture</p> <p>SC.K.P.9.1 – Recognize that shapes of materials can be changed by cutting, tearing, crumpling, smashing or rolling</p> <p>Unit 6-(3 lessons) <u>Big Idea 10</u> Forms of Energy</p> <p>SC.K.P.10.1 – Sound vibration</p> <p>Unit 7 (4 lessons) <u>Big Idea 5:</u> Earth in Space and Time <u>Big Idea 12:</u> Motion of Objects <u>Big Idea 13:</u> Forces and Changes in Motion</p> <p>SC.K.E.5.1 – Law of Gravity</p> <p>SC.K.P.12.1 – Observe that things move in different ways, fast, slow, etc</p> <p>SC.K.P.13.1 – a push or pull can change the way an object is moving</p>

1st Grade Year at a Glance

Nature of Science standards should be reinforced through all content based standards throughout the school year.

1 st Nine Weeks	2 nd Nine Weeks	3 rd 9 weeks	4 th Nine Weeks
<p><u>Nature of Science</u> Unit 1 (5 lessons) Unit 2 (4 lessons)</p> <p><u>Big Idea 1: The Practice of Science</u> SC.1.N.1.1 – Raise investigate questions about the natural world, generate explanations based on exploration</p> <p>SC.1.N.1.4 – Ask “how do you know?” questions</p> <p>SC.1.N.1.3 – Keep accurate records SC.1.N.1.2 – Use the 5 senses as tools to make observations</p>	<p><u>Earth & Space Science</u> Unit 3 (4 lessons) Unit 4 (4 lessons)</p> <p><u>Big Idea 5: Earth in Space and Time</u> SC.1.E.5.1 – Observe that there are more stars in the sky than can be counted and they are scattered unevenly</p> <p>SC.1.E.5.2 – Law of Gravity</p> <p>SC.1.E.5.3 – Investigate how magnifiers make things bigger and help people see things they could not see without them</p> <p><u>Big Idea 6: Earth Structures</u> SC.1.E.6.1 – Recognize water, rocks, soil and living organisms are found on Earth.</p> <p>SC.1.E.6.3 – Recognize some things on Earth happen fast and some happen slowly</p> <p>SC.1.E.6.2 – Need for water and how to be safe around it.</p> <p>SC.1.E.5.4 – Beneficial and harmful properties of the Sun</p>	<p><u>Physical Science</u> <u>Physical Science</u> Unit 5 (3 lessons) Unit 6 (4 lessons)</p> <p><u>Big Idea 8: Properties of Matter</u> SC.1.P.8.1 – Sort objects by observable properties - Size, Shape, Color, Temperature, Weight, Texture and Sink/Float</p> <p><u>Big Idea 12: Motion of Objects</u> SC.1.P.12.1 – Demonstrate and describe ways in which objects move</p> <p><u>Big Idea 13: Forces and Changes in Motion</u> SC.1.P.13.1 – Changes in motion as a result of a push or pull</p>	<p><u>Life Science</u> Unit 7 (5 lessons) Unit 8 (2 lessons) Unit 9 (3 lessons)</p> <p><u>Big Idea 14: Organization and Development of Living Organisms</u> SC.1.L.14.1 – Make observations of living things using the 5 senses</p> <p>SC.1.L.14.3 – Differentiate between living and nonliving things</p> <p>SC.1.L.14.2 – Identify major parts of plants (roots, stem, leaves and flowers)</p> <p><u>Big Idea: 16: Heredity and Reproduction</u> SC.1.L.16.1 – Make observations that plants and animals closely resemble their parents, but variations exist among individuals within a population</p> <p><u>Big Idea 17: Interdependence</u> SC.1.L.17.1 –Recognize that all plants and animals including humans, need the basic necessities (air, water, food and space)</p>

2nd Grade Year at a Glance

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
<p><u>Nature of Science</u> Unit 1 (5 lessons); Unit 2 (4 lessons)</p> <p>Big Idea 1- The Practice of Science: SC.2.N.1.1 – Raise and investigate questions about the natural world, generate explanations based on exploration SC.2.N.1.2 – Compare observations made by teams using different tools SC.2.N.1.3 – Ask “how do you know?” SC.2.N.1.4 – Particular scientific investigations should yield similar results SC.2.N.1.5 – Observation vs. Inference SC.2.N.1.6 – Scientists investigate new ways to solve problems</p> <p><u>Physical Science</u> Unit 8 (4 lessons) Big Idea 13-Forces of Motion SC.2.P.13.1 – Investigate the effects of applied forces (push and pull) SC.2.P.13.2 – Demonstrate that magnets can be used to move objects without touching them SC.2.P.13.3 – Objects are pulled toward the ground unless something holds them up (Law of Gravity) SC.2.P.13.4 – The greater the force (push or pull) applied to an object, the greater the motion of the object.</p>	<p><u>Earth / Space Science</u> Unit 3 (3 lessons); Unit 4 (4 lessons)</p> <p>Big Idea 6 - Earth Structures SC.2.E.6.1 – Earth is made up of rocks. Rocks come in many shapes and sizes SC.2.E.6.2 – Small pieces of rocks and dead plant/animal parts can make up soil. Explain how soil is formed. SC.2.E.6.3 – Classify soil</p> <p><u>Earth / Space Science</u> Big Idea 7-Earth Systems and Patterns SC.2.E.7.1 – Changing patterns in nature that repeat themselves SC.2.E.7.2 – Sun’s energy directly and indirectly warms the water, land and air SC.2.E.7.3 – Water evaporates in an open container but not a closed SC.2.E.7.4 – Air is all around us and moving air is wind SC.2.E.7.5 – Severe weather preparation</p>	<p><u>Physical Science Cont.</u> Unit 5 (4 lessons); Unit 6 (2 lessons); Unit 7 (2 lessons)</p> <p>Big Idea 9- Changes in Matter Big Idea 8- Properties of Matter SC.2.P.8.1 – Observe and measure the properties of objects SC.2.P.8.2 – Identify objects as solid, liquid or gas SC.2.P.8.3 – Solids have a definite shape and liquids and gases take the shape of their container SC.2.P.8.4 – Observe and describe water as a solid, liquid and gas state SC.2.P.8.5 – Measure and compare daily temperatures SC.2.P.8.6 – Measure and compare the volume of liquids using a variety of containers SC.2.P.9.1 – Materials can be altered to change some of their properties, but not all materials respond the same way to any one alteration</p> <p>Big Idea 10- Forms of Energy SC.2.P.10.1 – People use electricity and other forms of energy to cook, cool and warm homes and power their cars</p>	<p><u>Life Science</u> Unit 9 (2 lessons); Unit 10 (3 lessons) Unit 11 (4 lessons)</p> <p>Big Idea 16-Hereditry and Reproduction SC.2.L.16.1 – Major life cycles of plants and animals</p> <p>Big Idea 17-Interdependance SC.2.L.17.1 – Compare and contrast the basic needs that all living thing have for survival SC.2.L.17.2 – Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs</p> <p>Big Idea 14-Organization and Development of Living Organisms- SC.2.L.14.1 – Human Body</p>

3rd Grade Year at a Glance

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
<p>NATURE OF SCIENCE</p> <p><u>Big Idea 1: The Practice of Science</u> *SC.3.N.1.1 - Raise questions, investigate, form explanations *SC.3.N.1.2 - Compare observations made by groups using the same tools, explain differences *SC.3.N.1.3 – Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted. *SC.3.N.1.4 – Recognize the importance of communication among scientists. *SC.3.N.1.5 - Scientists question, discuss and check each other’s evidence *SC.3.N.1.6 – Infer based on observation. *SC.3.N.1.7 – Empirical evidence is information that is used to help validate explanations of natural phenomena *SC.3.N.3.1 – Recognize that words in science can have different or more specific meanings. *SC.3.N.3.2 – Recognize that scientists use models to help understand and explain how things work. *SC.3.N.3.3 – Recognize that all models are approximations of natural phenomena. Florida Science: Unit 1</p> <p>The Engineering Process</p> <p><u>Big Idea 1: The Practice of Science</u> *SC.3.N.1.1 - Raise questions, investigate, form explanations *SC.3.N.1.3 – Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted. *SC.3.N.1.4 – Recognize the importance of communication among scientists. *SC.3.N.1.6 – Infer based on observation. *SC.3.N.1.7 – Empirical evidence is information that is used to help validate explanations of natural phenomena *SC.3.N.3.2 – Recognize that scientists use models to help understand and explain how things work. Florida Science: Unit 2</p>	<p>PHYSICAL SCIENCE</p> <p><u>Big Idea 8: Properties of Matter</u> *SC.3.P.8.1 – Measure and compare temperatures of various samples of solids and liquids *SC.3.P.8.2 – Measure and compare the mass and volume of solids and liquids *SC.3.P.8.3 – Compare materials and objects according to properties such as size, shape, color, texture and hardness Florida Science: Unit 4 Lessons 1, 2 and 3</p> <p><u>Big Idea 9: Changes in Matter</u> *SC.3.P.9.1 – Describe the changes water undergoes when it changes state through heating and cooling by using familiar scientific terms such as melting, freezing, boiling, evaporation, and condensation Florida Science: Unit 4 Lessons 4 and 5</p> <p><u>Big Idea 10: Forms of Energy</u> *SC.3.P.10.1 – Identify some basic forms of energy such as light, heat, sound, electrical, and mechanical *SC.3.P.10.2 – Recognize that energy has the ability to cause motion or create change Florida Science: Unit 4 Lesson 1</p> <p><u>Big Idea 10: Forms of Energy</u> *SC.3.P.10.3 – Demonstrate that light travels in a straight line until it strikes an object or travels from one medium to another *SC.3.P.10.4 – Demonstrate that light can be reflected, refracted, and absorbed Florida Science: Unit 5 Lessons 2 and 3</p>	<p>PHYSICAL SCIENCE</p> <p><u>Big Idea 11: Energy Transfer and Transformations</u> *SC.3.P.11.1 – Investigate, observe and explain that things that give off light also give off heat *SC.3.P.11.2 – Investigate, observe, and explain that heat is produced when one object rubs against another, such as rubbing one’s hands together. Florida Science: Unit 6</p> <p>EARTH SCIENCE</p> <p><u>Big Idea 5: Earth in Space and Time</u> *SC.3.E.5.1 – Explain that stars can be different (smaller/larger, appear brighter, farther away); all but the Sun are so far away they look like dots in the sky *SC.3.E.5.2 – Identify the Sun as a star that emits energy *SC.3.E.5.3 – The Sun appears large and bright because it is the closest star to Earth *SC.3.E.5.5 – Investigate the number of stars that can be seen. Florida Science: Unit 3 Lessons 1 and 2</p> <p><u>Big Idea 6: Earth Structures</u> * SC.3.E.6.1 – Demonstrate that radiant energy from the sun can heat objects and when the Sun is not present, heat may be lost. Florida Science: Unit 3 Lesson 3</p> <p><u>Big Idea 5: Law of Gravity</u> *SC.3.E.5.4 – Explore the Law of Gravity and demonstrate that it is a force that can be overcome. Florida Science: Unit 3 Lesson 4</p>	<p>LIFE SCIENCE</p> <p><u>Big Idea 14: Organization and Development of Living Things</u> *SC.3.L.14.1 – Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction *SC.3.L.14.2 – Investigate and describe how plants respond to stimuli *SC.3.L.17.2 – Recognize that plants use energy from the Sun, air and water to make their own food Florida Science: Unit 7</p> <p><u>Big Idea 15: Diversity and Evolution of Living Organisms</u> *SC.3.L.15.2 – Classify flowering and nonflowering plant into major groups such as producing seeds vs. spores, according to their physical characteristics Florida Science: Unit 8 Lesson 1 and 4</p> <p><u>Big Idea 15: Diversity and Evolution of Living Organisms</u> *SC.3.L.15.1 – Classify animals into major groups according to their physical characteristics and behaviors Florida Science: Unit 8 Lessons 2-4</p> <p><u>Big Idea 17: Interdependence</u> *SC.3.L.17.1 – Describe how animals and plants respond to changing seasons Florida Science: Unit 9 Lesson 1</p> <p>*SC.3.L.17.2 – Recognize that plants use energy from the Sun, air, and water to make their own food. Florida Science: Unit 9 Lesson 2 and 3</p>

Yellow Highlighted – Standards taught exclusively in 3rd grade and tested on 5th grade SSA.

4th Grade Year at a Glance

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
<p>Nature of Science</p> <p><u>Big Idea 1-3: The Practice of Science</u> *SC.4.N.1.1- Raise questions about the natural world, use reference materials, conduct investigations and generate explanations based on explorations. *SC.4.N.1.2- Compare the observations made by different groups using multiple tools and seek reasons to explain differences across groups *SC.4.N.1.3- Explain that science does not always follow a rigidly defined method but does use observations and empirical evidence *SC.4.N.1.5-Compare the methods and results of investigations done by other classmates *SC.4.N.1.6-Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations *SC.4.N.1.7-Recognize and explain that scientists base their explanations on evidence SC.4.N.3.1 – Not assessed but embedded into daily science instruction FL SCIENCE: Unit 1 – Studying Science</p> <p><u>Big Idea 1: The Practice of Science</u> *SC.4.N.1.1- Raise questions about the natural world, use reference materials, conduct investigations and generate explanations based on explorations. *SC.4.N.1.6-Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations *SC.4.N.1.7-Recognize and explain that scientists base their explanations on evidence *SC.4.N.1.8-Recognize that science involves creativity in designing experiments *SC.4.N.2.1 Explain that science focuses solely on the natural world. *SC.4.N.3.1 Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model. FL SCIENCE: Unit 2 – The Engineering Process</p> <p>Physical Science</p> <p><u>Big Idea 8: Properties of Matter</u> <u>*SC.4.P.8.1</u>- Measure and compare objects and materials based on their physical properties SC.4.P.8.2 – Identify properties and common uses of water in each of its states Florida Science: Unit 5 Lessons 1-2 and 4 -Physical Properties of Matter -States and Uses of Water SC.4.P.8.3 – Law of Conservation of Mass FL SCIENCE: Unit 5 Lesson 3 - Not assessed <u>*SC.4.P.8.4</u> – Investigate and describe that magnets can attract materials and attract and repel other magnets FL SCIENCE: Unit 5 Lessons 5-6 -Magnetism</p>	<p>Physical Science</p> <p><u>Big Idea 9: Changes in Matter</u> *SC.P.4.9.1 – Identify some familiar changes in materials that result in other materials with different characteristics, such as decaying animal or plant matter, burning, rusting and cooking. FL SCIENCE: Unit 6 Matter & Its Changes -Physical and Chemical Changes</p> <p><u>Big Idea 10: Forms of Energy</u> *SC.4.P.10.1 – Observe and describe some basic forms of energy *SC.4.P.10.2 – Investigate and describe that energy has the ability to cause motion or create change <u>*SC.4.P.10.3</u> – Investigate and explain that sound is produced by vibrating objects and that pitch depends on how fast or slow the object vibrates <u>*SC.4.P.10.4</u> – Describe how moving water and air are sources of energy and can be used to move things FL SCIENCE: UNIT 7 Energy and Its Uses -Forms of Energy, Sources of Energy -What is Sound?</p> <p><u>Big Idea 11: Energy Transfer and Transformations</u> <u>*SC.4.P.11.1</u> – Recognize that heat flows from a hot object to a cold object and that heat flow may cause materials to change temperature <u>*SC.4.P.11.2</u> – Identify common materials that conduct heat well and poorly FL SCIENCE: Unit 8 Heat -How is Heat Produced -Conductors and Insulators</p>	<p><u>Big Idea 12: Motion of Objects</u> *SC.4.P.12.1 – Recognize that an object in motion always changes its position and may change its direction <u>*SC.4.P.12.2</u> – Investigate and describe that the speed of an object is determined by the distance it travels in a unit of time and that objects can move at different speeds FL SCIENCE: Unit 9 Forces of Motion -What is Motion, What causes Motion -Speed</p> <p>Earth and Space</p> <p><u>Big Idea 5: Earth in Space and Time</u> <u>*SC.4.E.5.1</u>- Observe that the patterns of the stars in the sky stay the same although they appear to shift across the sky nightly, and different stars can be seen in different seasons <u>*SC.4.E.5.2</u>- Describe the changes in the observable shape of the Moon over the course of about a month <u>*SC.4.E.5.3</u>- Recognize that Earth revolves around the Sun in a year and rotates on its axis in a 24-hour day <u>*SC.4.E.5.4</u>- Relate that the rotation and apparent movements of the Sun, Moon and stars are connected FL SCIENCE: Unit 3 Earth's Place in Space -Rotation and Revolution -Phases of the Moon</p> <p>Earth and Space</p> <p><u>Big Idea 6: Earth Structures</u> <u>*SC.4.E.6.1</u>- Identify the three categories of rocks <u>*SC.4.E.6.2</u> – Identify the physical properties of common earth-forming minerals and recognize the role of minerals in the formation of rocks FL SCIENCE: Unit 4 Lessons 2-4 -Properties of Rocks, Classifying Rocks</p> <p><u>Big Idea 6: Earth Structures</u> <u>*SC.4.E.6.4</u> – Describe the basic differences between physical weathering and erosion FL SCIENCE: Unit 4 Lesson 1 -Weathering and Erosion</p> <p><u>Big Idea 6: Earth Structures</u> <u>*SC.4.E.6.3</u> –Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable <u>*SC.4.E.6.6</u> – Identify resources available in Florida <u>*SC.4.P.10.4</u> – Describe how moving water and air are sources of energy and can be used to move things FL SCIENCE: Unit 4 Lesson 5 -Renewable and Non-renewable Resource</p>	<p>Life Science</p> <p><u>Big Idea 16: Heredity & Reproduction</u> <u>*SC.4.L.16.1</u>- Identify processes of sexual reproduction in flowering plants FL SCIENCE: Unit 10 Lessons 1-2 -Parts of a Flower -Sexual and Asexual Reproduction, Germination with Seed Dispersal</p> <p><u>Big Idea 16: Heredity & Reproduction</u> *SC.4.L.16.2 – Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment *SC.4.L.16.3- Recognize that animal behaviors may be shaped by heredity and learning FL SCIENCE: Unit 10 Lesson 4 -Innate and Learned Behaviors</p> <p><u>Big Idea 16: Heredity & Reproduction</u> <u>*SC.4.L.16.4</u>- Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants FL SCIENCE: Unit 10 Lesson 3 -Life Cycles in Florida</p> <p><u>Big Idea 17: Interdependence</u> *SC.4.L.17.1 – Compare the seasonal changes in Florida plants and animals to those in other regions of the country FL SCIENCE: Unit 11 Lesson 1 -Seasonal Adaptations</p> <p><u>Big Idea 17: Interdependence</u> <u>*SC.4.L.17.2</u> – Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them <u>*SC.4.L.17.3</u>– Trace the flow of energy from the Sun as it is transferred along the food chain through the producer to the consumer FL SCIENCE: Unit 10 Lessons 2-3 -Food Chains with Producers & Consumers</p> <p><u>Big Idea 17: Interdependence</u> <u>*SC.4.L.17.4</u> – Recognize ways that plants and animals, including humans, can impact the environment FL SCIENCE: Unit 11 Lessons 4-5 -Plant, Animal and Human Impact of the Environment</p>

5th Grade Year at a Glance

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
<p><u>Science Safety & Expectations</u></p> <p style="text-align: center;"><u>Nature of Science</u></p> <p><u>Big Idea 1: The Practice of Science</u> SC.5.N.1.1 Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. SC.5.N.1.2 Explain the difference between an experiment and other types of scientific investigation. SC.5.N.1.3 Recognize and explain the need for repeated experimental trials. SC.5.N.1.4 Identify a control group and explain its importance in an experiment. SC.5.N.1.5 Recognize and explain that authentic scientific investigation frequently does not parallel the steps of “the scientific method.” SC.5.N.1.6 Recognize and explain the difference between personal opinion/interpretation and verified observation.</p> <p>FL SCIENCE – Unit 1 Scientists at Work (1-2 Weeks)</p> <p><u>Big Idea 2: The Characteristics of Scientific Knowledge</u> SC.5.N.2.1 Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence. SC.5.N.2.2 Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.</p> <p>FL SCIENCE – Unit 1 Scientists at Work (1-2 Weeks)</p> <p style="text-align: center;"><u>PHYSICAL SCIENCE</u></p> <p><u>Big Idea 8: Properties of Matter</u> SC.5.P.8.1 Compare and contrast the basic properties of solids, liquids, and gases, such as mass, volume, color, texture, and temperature. SC.5.P.8.2 Investigate and identify materials that will dissolve in water and those that will not and identify conditions that will speed up or slow down the dissolving process. SC.5.P.8.3 Demonstrate and explain that mixtures of solids can be separated based on observable properties of their parts such as particle size, shape, color, and magnetic attraction. SC.5.P.8.4 Explore the scientific theory of atoms (also called atomic theory) by recognizing that all matter is composed of parts that are too small to be seen without magnification.</p> <p><u>Big Idea 9: Changes in Matter</u> SC.5.P.9.1 Investigate and describe that many physical and chemical changes are affected by temperature.</p> <p>FL SCIENCE – Unit 5 The Nature of Matter (2-3 Weeks)</p>	<p style="text-align: center;"><u>PHYSICAL SCIENCE</u></p> <p><u>Big Idea 10: Forms of Energy</u> SC.5.P.10.1 Investigate and describe some basic forms of energy, including light, heat, sound, electrical, chemical, and mechanical. SC.5.P.10.2 Investigate and explain that energy has the ability to cause motion or create change. SC.5.P.10.3 Investigate and explain that an electrically-charged object can attract an uncharged object and can either attract or repel another charged object without any contact between the objects. SC.5.P.10.4 Investigate and explain that electrical energy can be transformed into heat, light, and sound energy, as well as the energy of motion.</p> <p>FL SCIENCE – Unit 6 Forms of Energy (2-3 Weeks)</p> <p><u>Big Idea 11: Energy Transfer & Transformations</u> SC.5.P.11.1 Investigate and illustrate the fact that the flow of electricity requires a closed circuit (a complete loop). SC.5.P.11.2 Identify and classify materials that conduct electricity and materials that do not.</p> <p>FL SCIENCE – Unit 7 Working with Electricity (2-3 Weeks)</p> <p><u>Big Idea 13: Forces and Changed in Motion</u> SC.5.P.13.1 Identify familiar forces that cause objects to move, such as pushes or pulls, including gravity acting on falling objects. SC.5.P.13.2 Investigate and describe that the greater the force applied to it, the greater the change in motion of a given object. SC.5.P.13.3 Investigate and describe that the more mass an object has, the less effect a given force will have on the object’s motion. SC.5.P.13.4 Investigate and explain that when a force is applied to an object but it does not move, it is because another opposing force is being applied by something in the environment so that the forces are balanced.</p> <p>FL SCIENCE – Unit 8 Forces and Motion (2-3 Weeks)</p> <p style="text-align: center;"><u>EARTH SCIENCE</u></p> <p><u>Big Idea 5: Earth in Space and Time</u> SC.5.E.5.1 Recognize that a galaxy consists of gas, dust and many stars, including any objects orbiting the stars. Identify our home galaxy as the Milky Way. SC.5.E.5.2 Recognize the major common characteristics of all planets and compare/contrast the properties of inner and outer planets. SC.5.E.5.3 Distinguish among the following objects of the Solar System- Sun, planets, moons, asteroids, comets– and identify Earth’s position in it.</p> <p>FL SCIENCE – Unit 3 The Solar System and The Universe (2-3 Weeks)</p> <p>*Mid Year Assessment – window (December 4-January 14)</p>	<p style="text-align: center;"><u>EARTH SCIENCE</u></p> <p><u>Big Idea 7: Earth Systems and Patterns</u> SC.5.E.7.1 Create a model to explain the parts of the water cycle. Water can be a gas, a liquid, or a solid and can go back and forth from one state to another. SC.5.E.7.2 Recognize that the ocean is an integral part of the water cycle and connected to all Earth’s water reservoirs via evaporation and precipitation processes. SC.5.E.7.3 Recognize how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time.</p> <p>FL SCIENCE – Unit 4 Weather, Climate and the Water Cycle (2-3 Weeks)</p> <p style="text-align: center;"><u>LIFE SCIENCE</u></p> <p><u>Big Idea 14: The Structure of Living Things</u> SC.5.L.14.1 Identify the organs in the human body and describe their functions, including the skin, brain, heart, lungs, stomach, liver, intestines, pancreas, muscles, and skeleton, reproductive organs, kidneys, bladder, and sensory organs. SC.5.L.14.2 Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support—some with internal skeletons others with exoskeletons—while some plants have stems for support.</p> <p>FL SCIENCE – Unit 9 The Structure of Living (2-3 Weeks)</p> <p><u>Big Idea 15: Diversity and Evolution of Living Organisms</u> SC.5.L.15.1 Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.</p> <p>FL SCIENCE – Unit 10 Changes in Environments (2-3 Weeks)</p>	<p style="text-align: center;"><u>LIFE SCIENCE</u></p> <p><u>Big Idea 17: Interdependence</u> SC.5.L.17.1 Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycle variations, animal behaviors and physical characteristics.</p> <p>FL SCIENCE – Unit 11 Plant and Animal Adaptations (2-3 Weeks)</p> <p style="text-align: center;"><u>Nature of Science</u></p> <p><u>Big Idea 1: The Practice of Science</u> See 1st Nine Weeks for Big Idea Benchmarks</p> <p>FL SCIENCE – Unit 2 Scientists at Work (1-2 Weeks)</p> <p style="text-align: center;"><u>REVIEW</u></p> <p>SSA (FCAT) Review The following items are covered in 3rd and 4th grade and not taught by the 5th grade curriculum</p> <ul style="list-style-type: none"> - Rotation and Revolution - Stars Relative Movement - Properties of Rocks and Minerals - The Rock Cycle - Renewable and Nonrenewable Resources - Physical Weathering and Erosion - Life Cycles of FL plants and animals - Food Chains / Producers and Consumers - Classification - Plants - Light - Sound - Properties of Magnets <hr/> <p>Hurricane Readiness can be taught at the beginning of the year (during hurricane season). Hurricane Readiness</p> <ul style="list-style-type: none"> - Tracking Hurricanes - Impact of natural disasters on Florida - Creating a natural disaster plan <p>Standard: SC.5.E.7.7</p>