

Quarter 1	CURRICULUM <i>End Product of Learning, “What You Teach”</i>		INSTRUCTION <i>Means to the End Product of Learning, “What You Teach”</i>		TECHNOLOGY <i>Means to Engage Students and Provide Practice</i>	INTERVENTION and ASSESSMENT
	CONTENT What we want students to “KNOW”	SKILL What we want students to “DO”	LEARNING RESOURCES	TEACHING STRATEGIES	SOFTWARE and ONLINE Sites	Varied Classroom Assessment Strategies
	<p><b><u>CORE IDEAS</u></b></p> <p><b>PS2.A Forces and Motion</b> Pushes and pulls can have different strengths and directions.</p> <p>Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.</p> <p><b>PS2.B Types of Interactions</b> When objects touch or collide, they push on one another and change motion</p> <p><b>PS3.C Relationships Between Energy and Forces</b> A bigger push or pull makes things go faster.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b> <b>Plan and Carry Out Investigations</b> With guidance, plan and conduct an investigation in collaboration with peers</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b> <b>Cause and Effect</b> Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b></p> <p><b>K-PS2-1</b> Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.</p>	<p><b>RESOURCES:</b> <i>Smithsonian Science and Technology Concepts™</i> <b>Exploring Forces and Motion Unit Lessons 1-4</b></p> <p><b>SUBCONCEPT 1</b> – We can describe positions of objects relative to each other. <b>Lesson 1</b> <b>SUBCONCEPT 2</b> –Motion is the change in an object’s position. <b>Lessons 2-3</b> <b>SUBCONCEPT 3</b> – Forces are pushes or pulls on objects. <b>Lesson 4</b></p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Big Book</i> <i>-Science Notebooking</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a> <b>What is Force?</b> -Velodrome - What is a Force?</p>	<p><i>Smithsonian Science and Technology Concepts™</i> <b>Integrated FERA Cycle Instruction of</b> Crosscutting concepts and science and engineering practices with science core ideas</p> <p><b>FOCUS Strategies include:</b> -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p><b>EXPLORE Strategies include:</b> -inquiry-based discussions and investigations -classroom activities, inquiries and models to help students develop a further understanding of the concepts/core ideas being discussed</p> <p><b>REFLECT Strategies include:</b> -Science Notebooking -Key Ideas -Academic Vocabulary</p> <p><b>APPLY Strategies include:</b> -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p>	<p><b>RESOURCES:</b> <a href="http://www.carolinascienceonline.com">www.carolinascienceonline.com</a></p> <ul style="list-style-type: none"><li>Interactive Whiteboard Activities</li><li>STC Big Book</li><li>Smithsonian Simulations</li><li>Smithsonian DVD Videos</li><li>Smithsonian Songs</li></ul> <p><a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a></p> <ul style="list-style-type: none"><li>Video Sets related to Forces and Motion</li></ul> <p><a href="http://www.mysi.edu">www.mysi.edu</a> Smithsonian information website</p> <p><b>DEVICES:</b></p> <ul style="list-style-type: none"><li>iPads</li><li>Tablets</li><li>Chromebooks</li><li>ELMO</li><li>SMARTboard</li></ul> <p><b>SOFTWARE:</b></p> <ul style="list-style-type: none"><li>Microsoft Powerpoint</li><li>Microsoft Word</li><li>SMARTboard activities</li></ul>	<p><b>INTERVENTIONS:</b> <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none"><li>Learning Center Opportunities</li><li>Science Notebooks</li><li>Extensions</li></ul> <p><b>ASSESSMENTS:</b> <i>Smithsonian Science and Technology Concepts™</i> Exploring Forces and Motion Unit</p> <p><b>Lesson 1 Pre-Assessment</b> <i>Students describe their own positions in relation to other objects, observe movement outside the classroom, and record movements they do throughout the day.</i></p> <p><b>Parts A, B, C and Final Activity Assessments</b></p> <p><b>Lesson 7 Assessment</b> <i>Students demonstrate and extend their understanding of forces and motion to their own everyday observations and in playing and inventing games.</i></p> <p><b>Science Notebooks</b></p>
	<p><b><u>CORE IDEAS</u></b></p> <p><b>PS2.A Forces and Motion</b> Pushes and pulls can have different strengths and directions.</p> <p>Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.</p> <p><b>ETS1.A Defining Engineering Problems</b> A situation that people want to change or create can be approached as a problem to be solved through engineering. Such problems may have many acceptable solutions.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b> <b>Analyzing and Interpreting Data</b> Analyze data from test of an object or tool to determine if it works as intended</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b> <b>Cause and Effect</b> Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b></p> <p><b>K-PS2-2</b> Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.</p>	<p><b>RESOURCES:</b> <i>Smithsonian Science and Technology Concepts™</i> <b>Exploring Forces and Motion Unit Lessons 5-7</b></p> <p><b>SUBCONCEPT 4</b> – <b>Forces change the motion of objects.</b> They can cause objects to start moving, go faster, slower, stop, or change directions. <b>Lessons 5-7</b></p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Big Book</i> <i>-Science Notebooking</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a> <b>What is Force?</b> -Velodrome - What is a Force?</p>	<p><b><u>COMMON CORE</u></b> <b>Reading Informational Text RI.1-9:</b> RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p><b>Writing W.1-9</b> W.1-3 Text Types and Purpose W.4-6 Production and Distribution of Writing W.7-9 Research to Build and Present Knowledge</p> <p><b><u>GUIDING QUESTIONS</u></b> <i>How can we change the speed and direction of an object using different amounts of strength?</i></p> <p><i>How can one object change the motion of another?</i></p> <p><i>How can we make an object move faster?</i></p>		

Quarter 2	CURRICULUM <i>End Product of Learning, “What You Teach”</i>		INSTRUCTION <i>Means to the End Product of Learning, “What You Teach”</i>		TECHNOLOGY <i>Means to Engage Students and Provide Practice</i>	INTERVENTION and ASSESSMENT
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	<p><b><u>CORE IDEAS</u></b> <b>ESS2.D Weather and Climate</b> Weather is the combination of sunlight, wind, snow or rain and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather an to notice patterns over time.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b> <b>Analyzing and Interpreting Data</b> Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b> <b>Patterns</b> Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b> <b>K-ESS2-1</b> Use and share observations of local weather conditions to describe patterns over time.</p>	<p><b>RESOURCES:</b> <i>Smithsonian Science and Technology Concepts™</i> <b>Exploring My Weather Unit</b> <b>Unit Lessons 1-6; 8</b></p> <p><b>SUBCONCEPT 1</b> – Weather conditions are variable and may include hot, warm, cool, cold, sunny snowy, rainy, and/or windy. The Sun warms the land, air, and water on Earth and affects weather. <b>Lesson 1</b></p> <p><b>SUBCONCEPT 2</b> –Weather can be described by measureable features (variables) such as temperature, cloud cover, wind direction and speed, and precipitation. Weather can be measured. <b>Lessons 2-5</b></p> <p><b>SUBCONCEPT 3</b> – Water is an important part of weather. Water can be liquid, solid, or gas and changes from one state to another. <b>Lesson 6</b></p> <p><b>SUBCONCEPT 5</b> – Weather changes regularly from day to day and over the seasons, creating observable patterns. These patterns help us to make predictions. <b>Lesson 8</b></p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Big Book</i> <i>-Science Notebooking</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a> <b>Weather</b></p>	<p><i>Smithsonian Science and Technology Concepts™</i> <b>Integrated FERA Cycle Instruction of</b> Crosscutting concepts and science and engineering practices with science core ideas</p> <p><b>FOCUS Strategies include:</b> -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p><b>EXPLORE Strategies include:</b> -inquiry-based discussions and investigations -classroom activities, inquiries and models to help students develop a further understanding of the concepts/core ideas being discussed</p> <p><b>REFLECT Strategies include:</b> -Science Notebooking -Key Ideas -Academic Vocabulary</p> <p><b>APPLY Strategies include:</b> -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p><b><u>COMMON CORE</u></b> <b>Reading Informational Text RI.1-9:</b> RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p><b>Writing W.1-9</b> W.1-3 Text Types and Purpose W.4-6 Production and Distribution of Writing W.7-9 Research to Build and Present Knowledge</p> <p><b><u>GUIDING QUESTIONS</u></b> <i>-What is weather?</i>  <i>-What can we do to identify weather patterns?</i>  <i>-Why do scientists forecast the weather?</i></p>	<p><b>RESOURCES:</b> <a href="http://www.carolinascienceonline.com">www.carolinascienceonline.com</a></p> <ul style="list-style-type: none"><li>Interactive Whiteboard Activities</li><li>STC Big Book</li><li>Smithsonian Simulations</li><li>Smithsonian DVD Videos</li><li>Smithsonian Songs</li></ul> <p><a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a></p> <ul style="list-style-type: none"><li>Video Sets related to Forces and Motion</li></ul> <p><a href="http://www.mysi.edu">www.mysi.edu</a> Smithsonian information website</p> <p><b>DEVICES:</b></p> <ul style="list-style-type: none"><li>iPads</li><li>Tablets</li><li>Chromebooks</li><li>ELMO</li><li>SMARTboard</li></ul> <p><b>SOFTWARE:</b></p> <ul style="list-style-type: none"><li>Microsoft Powerpoint</li><li>Microsoft Word</li><li>SMARTboard activities</li></ul>	<p><b>INTERVENTIONS:</b> <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none"><li>Learning Center Opportunities</li><li>Science Notebooks</li><li>Extensions</li></ul> <p><b>ASSESSMENTS:</b> <i>Smithsonian Science and Technology Concepts™</i> Exploring My Weather</p> <p><b>Lesson 1 Pre-Assessment</b> <i>Students share what they know and their questions they have about weather.</i></p> <p><b>Parts A, B, C and Final Activity Assessments</b></p> <p><b>Lesson 7 Assessment</b> <i>Students review weather patterns from their weather calendar, explore how seasonal changes affect weather conditions, and discuss the importance of weather forecasting</i></p> <p><b>Science Notebooks</b></p>
	<p><b><u>CORE IDEAS</u></b> <b>ESS3.B Natural Hazards</b> Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast sever weather so that the communities can prepare for and respond to these events.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b> <b>Analyzing and Interpreting Data</b> Ask questions based on observations to find more information about the designed world.</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b> <b>Cause and Effect</b> Events have causes that generate observable patterns.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b> <b>K-ESS3-2</b> Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.</p>	<p><b>RESOURCES:</b> <i>Smithsonian Science and Technology Concepts™</i> <b>Exploring My Weather Unit</b> <b>Unit Lesson 7</b></p> <p><b>SUBCONCEPT 4</b> – Humans and other living things are affected by weather conditions. <b>Lesson 7</b></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a> <b>Weather</b></p>			

Quarter 2 cont...	CURRICULUM <i>End Product of Learning, “What You Teach”</i>		INSTRUCTION <i>Means to the End Product of Learning, “What You Teach”</i>		TECHNOLOGY <i>Means to Engage Students and Provide Practice</i>	INTERVENTION and ASSESSMENT
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	<p><b><u>CORE IDEAS</u></b> PS3.B Conservation of Energy and Energy Transfer Sunlight warms Earth’s surface.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b> <b>Planning and Carrying Out Investigations</b> Make observations (firsthand or from media) to collect data that can be used to make comparisons.</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b> <b>Cause and Effect</b> Events have causes that generate observable patterns.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b> <b>K-PS3-1</b> Make observations to determine the effect of sunlight on Earth’s surface.</p>	<p><b>RESOURCES:</b> <i>Smithsonian Science and Technology Concepts™</i> <b>Exploring My Weather Unit Unit Lesson 1</b></p> <p><b>SUBCONCEPT 1</b> – Weather conditions are variable and may include hot, warm, cool, cold, sunny snowy, rainy, and/or windy. The Sun warms the land, air, and water on Earth and affects weather. <b>Lesson 1</b></p> <p>-Inquiry Investigations -STC Literacy Series Big Book -Science Notebooking -Hands-on Equipment -Creating Models</p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a> <b>Weather</b></p>	<p><i>Smithsonian Science and Technology Concepts™</i> <b>Integrated FERA Cycle Instruction of</b> Crosscutting concepts and science and engineering practices with science core ideas</p> <p><b>FOCUS Strategies include:</b> -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p><b>EXPLORE Strategies include:</b> -inquiry-based discussions and investigations -classroom activities, inquiries and models to help students develop a further understanding of the concepts/core ideas being discussed</p> <p><b>REFLECT Strategies include:</b> -Science Notebooking -Key Ideas -Academic Vocabulary</p>	<p><b>RESOURCES:</b> <a href="http://www.carolinascienceonline.com">www.carolinascienceonline.com</a></p> <ul style="list-style-type: none"><li>Interactive Whiteboard Activities</li><li>STC Big Book</li><li>Smithsonian Simulations</li><li>Smithsonian DVD Videos</li><li>Smithsonian Songs</li></ul> <p><a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a></p> <ul style="list-style-type: none"><li>Video Sets related to Forces and Motion</li></ul> <p><a href="http://www.mysi.edu">www.mysi.edu</a> Smithsonian information website</p> <p><b>DEVICES:</b></p> <ul style="list-style-type: none"><li>iPads</li><li>Tablets</li><li>Chromebooks</li><li>ELMO</li><li>SMARTboard</li></ul> <p><b>SOFTWARE:</b></p> <ul style="list-style-type: none"><li>Microsoft Powerpoint</li><li>Microsoft Word</li><li>SMARTboard activities</li></ul>	<p><b>INTERVENTIONS:</b> <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none"><li>Learning Center Opportunities</li><li>Science Notebooks</li><li>Extensions</li></ul> <p><b>ASSESSMENTS:</b> <i>Smithsonian Science and Technology Concepts™</i> Exploring My Weather</p> <p><b>Lesson 1 Pre-Assessment</b> <i>Students share what they know and their questions they have about weather.</i></p> <p><b>Parts A, B, C and Final Activity Assessments</b></p> <p><b>Lesson 7 Assessment</b> <i>Students review weather patterns from their weather calendar, explore how seasonal changes affect weather conditions, and discuss the importance of weather forecasting</i></p> <p><b>Science Notebooks</b></p>
	<p><b><u>CORE IDEAS</u></b> PS3.B Conservation of Energy and Energy Transfer Sunlight warms Earth’s surface.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b> <b>Constructing Explanations and Designing Solutions</b> Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem.</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b> <b>Cause and Effect</b> Events have causes that generate observable patterns.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b> <b>K-PS3-2</b> Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.</p>	<p><b>RESOURCES:</b> <i>Smithsonian Science and Technology Concepts™</i> <b>Exploring My Weather Unit Unit Lessons 7-8</b></p> <p><b>SUBCONCEPT 4</b> – Humans and other living things are affected by weather conditions. <b>Lesson 7</b></p> <p><b>SUBCONCEPT 5</b> – Weather changes regularly from day to day and over the seasons, creating observable patterns. These patterns help us to make predictions. <b>Lesson 8</b></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a> <b>Weather</b></p>	<p><b>APPLY Strategies include:</b> -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p><b><u>COMMON CORE</u></b> <b>Reading Informational Text RI.1-9:</b> RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p><b>Writing W.1-9</b> W.1-3 Text Types and Purpose W.4-6 Production and Distribution of Writing W.7-9 Research to Build and Present Knowledge</p> <p><b><u>GUIDING QUESTIONS</u></b> <i>-How does the sun change the Earth’s surface?</i>  <i>-How do scientists solve problems?</i></p>		



Quarter 3

CURRICULUM End Product of Learning, “What You Teach”		INSTRUCTION Means to the End Product of Learning, “What You Teach”		TECHNOLOGY Means to Engage Students and Provide Practice	INTERVENTION and ASSESSMENT
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<p><b><u>CORE IDEAS</u></b></p> <p><b>LS1.C Organization for Matter and Energy Flow in Organisms</b></p> <p>All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b></p> <p><b>Analyzing and Interpreting Data</b></p> <p>Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b></p> <p><b>Patterns</b></p> <p>Patterns in the natural and human designed world can be observed and used as evidence.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b></p> <p><b>K-LS1-1</b></p> <p>Use observations to describe patterns of what plants and animals (including humans) need to survive.</p>	<p><b>RESOURCES:</b></p> <p><i>Smithsonian Science and Technology Concepts™</i></p> <p><b>Exploring Plants and Animals Unit</b></p> <p><b>Unit Lessons 1-6</b></p> <p><b>SUBCONCEPT 1</b> – Plants and animals are two types of living things, which have some common characteristics, such as growing and needing water. <b>Lesson 1</b></p> <p><b>SUBCONCEPT 2</b> – Plants have basic needs including water and light, Different plant seeds share some characteristics and are part of a plant’s life cycle. <b>Lessons 2-3</b></p> <p><b>SUBCONCEPT 3</b> – Animals share certain characteristics and have needs such as water and food, to live and grow. Animals meet their needs from the environments where they live. <b>Lessons 4-5</b></p> <p><b>SUBCONCEPT 4</b> – The parts and characteristics of plants are specialized to meet their basic needs in the environment in which each lives. <b>Lesson 6</b></p> <p><i>-Inquiry Investigations</i></p> <p><i>-STC Literacy Series Big Book</i></p> <p><i>-Science Notebooking</i></p> <p><i>-Hands-on Equipment</i></p> <p><i>-Creating Models</i></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a></p> <p><b>Plants; Animals</b></p>	<p><i>Smithsonian Science and Technology Concepts™</i></p> <p><b>Integrated FERA Cycle Instruction of</b></p> <p>Crosscutting concepts and science and engineering practices with science core ideas</p> <p><b>FOCUS Strategies include:</b></p> <p>-pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc.</p> <p>-guiding/focus questions</p> <p><b>EXPLORE Strategies include:</b></p> <p>-inquiry-based discussions and investigations</p> <p>-classroom activities, inquiries and models to help students develop a further understanding of the concepts/core ideas being discussed</p> <p><b>REFLECT Strategies include:</b></p> <p>-Science Notebooking</p> <p>-Key Ideas</p> <p>-Academic Vocabulary</p> <p><b>APPLY Strategies include:</b></p> <p>-Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p><b><u>COMMON CORE</u></b></p> <p><b>Reading Informational Text RI.1-9:</b></p> <p>RI.1-3 Key Ideas and Details</p> <p>RI.4-6 Craft and Structure</p> <p>RI.7-9 Integration of Knowledge and Ideas</p>	<p><b>RESOURCES:</b></p> <p><a href="http://www.carolinascienceonline.com">www.carolinascienceonline.com</a></p> <ul style="list-style-type: none"><li>Interactive Whiteboard Activities</li><li>STC Big Book</li><li>Smithsonian Simulations</li><li>Smithsonian DVD Videos</li><li>Smithsonian Songs</li></ul> <p><a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a></p> <ul style="list-style-type: none"><li>Video Sets related to Animals and Plants</li></ul> <p><a href="http://www.mysi.edu">www.mysi.edu</a></p> <p>Smithsonian information website</p> <p><b>DEVICES:</b></p> <ul style="list-style-type: none"><li>iPads</li><li>Tablets</li><li>Chromebooks</li><li>ELMO</li><li>SMARTboard</li></ul> <p><b>SOFTWARE:</b></p> <ul style="list-style-type: none"><li>Microsoft Powerpoint</li><li>Microsoft Word</li><li>SMARTboard activities</li></ul>	<p><b>INTERVENTIONS:</b></p> <p><i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none"><li>Learning Center Opportunities</li><li>Science Notebooks</li><li>Extensions</li></ul> <p><b>ASSESSMENTS:</b></p> <p><i>Smithsonian Science and Technology Concepts™</i></p> <p>Exploring Plants and Animals</p> <p><b>Lesson 1 Pre-Assessment</b></p> <p><i>Students explore how living organisms are different from non-living things. Students recognize that plants and animals are two types of living organisms.</i></p> <p><b>Parts A, B, C and Final Activity Assessments</b></p> <p><b>Lesson 8 Assessment</b></p> <p><i>Based on their earlier investigations, students compare and contrast plants and animals and explore and describe interactions between plants and animals within the same environment.</i></p> <p><b>Science Notebooks</b></p>
<p><b><u>CORE IDEAS</u></b></p> <p><b>ESS2.E</b></p> <p>Plants and animals can change their environment.</p> <p><b><u>SCIENCE and ENGINEERING PRACTICES</u></b></p> <p><b>Engaging in Argument from Evidence</b></p> <p>Construct and argument with evidence to support a claim</p> <p><b><u>CROSSCUTTING CONCEPTS</u></b></p> <p><b>Systems and System Models</b></p> <p>Systems in the natural and designed world have parts that work together.</p>	<p><b><u>PERFORMANCE EXPECTATION</u></b></p> <p><b>K-ESS2-2</b></p> <p>Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p>	<p><b>RESOURCES:</b></p> <p><i>Smithsonian Science and Technology Concepts™</i></p> <p><b>Exploring Plants and Animals Unit</b></p> <p><b>Unit Lessons 4-8</b></p> <p><b>SUBCONCEPT 3</b> – Animals share certain characteristics and have needs such as water and food, to live and grow. Animals meet their needs from the environments where they live. <b>Lessons 4-5</b></p> <p><b>SUBCONCEPT 5</b> – When living things, including humans, interact with their environments to meet their needs, it can change the environment. <b>Lessons 7-8</b></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a></p> <p><b>Plants and Animals</b></p>	<p><b>Writing W.1-9</b></p> <p>W.1-3 Text Types and Purpose</p> <p>W.4-6 Production and Distribution of Writing</p> <p>W.7-9 Research to Build and Present Knowledge</p> <p><b><u>GUIDING QUESTIONS</u></b></p> <p><i>-What do organisms need to grow and survive?</i></p> <p><i>-How do humans change the Earth?</i></p>		

Quarter 3 cont...	CURRICULUM <i>End Product of Learning, “What You Teach”</i>		INSTRUCTION <i>Means to the End Product of Learning, “What You Teach”</i>		TECHNOLOGY <i>Means to Engage Students and Provide Practice</i>	INTERVENTION and ASSESSMENT
	CONTENT What we want students to “KNOW”	SKILL What we want students to “DO”	LEARNING RESOURCES	TEACHING STRATEGIES	SOFTWARE and ONLINE Sites	Varied Classroom Assessment Strategies
	<p><b>CORE IDEAS</b></p> <p><b>ESS3.A Natural Resources</b></p> <p>Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.</p> <p><b>SCIENCE and ENGINEERING PRACTICES</b></p> <p><b>Developing and Using Models</b></p> <p>Make observations (firsthand or from media) to collect data that can be used to make comparisons.</p> <p><b>CROSSCUTTING CONCEPTS</b></p> <p><b>Systems and System Models</b></p> <p>Systems in the natural and designed world have parts that work together.</p>	<p><b>PERFORMANCE EXPECTATION</b></p> <p><b>K-ESS3-1</b></p> <p>Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p>	<p><b>RESOURCES:</b></p> <p><i>Smithsonian Science and Technology Concepts™</i></p> <p><b>Exploring Plants and Animals Unit</b></p> <p><b>Unit Lessons 1-4; 6-7</b></p> <p><b>SUBCONCEPT 1</b> – Plants and animals are two types of living things, which have some common characteristics, such as growing and needing water. <b>Lesson 1</b></p> <p><b>SUBCONCEPT 2</b> – Plants have basic needs including water and light, Different plant seeds share some characteristics and are part of a plant’s life cycle. <b>Lessons 2-3</b></p> <p><b>SUBCONCEPT 3</b> – Animals share certain characteristics and have needs such as water and food, to live and grow. 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	<p><b>CORE IDEAS</b></p> <p><b>ESS3.C Human Impacts on Earth Systems</b></p> <p>Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.</p> <p><b>SCIENCE and ENGINEERING PRACTICES</b></p> <p><b>Obtaining, Evaluating, and Communicating Information</b></p> <p>Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas.</p> <p><b>CROSSCUTTING CONCEPTS</b></p> <p><b>Cause and Effect</b></p> <p>Events have causes that generate observable patterns.</p>	<p><b>PERFORMANCE EXPECTATION</b></p> <p><b>K-ESS2-3</b></p> <p>Communicate solutions that will reduce the impact of humans on the land, water, and/or other living things in the local environment.</p>	<p><b>RESOURCES:</b></p> <p><i>Smithsonian Science and Technology Concepts™</i></p> <p><b>Exploring Plants and Animals Unit</b></p> <p><b>Unit Lessons 4-8</b></p> <p><b>SUBCONCEPT 3</b> – Animals share certain characteristics and have needs such as water and food, to live and grow. Animals meet their needs from the environments where they live. <b>Lesson 5</b></p> <p><b>SUBCONCEPT 5</b> – When living things, including humans, interact with their environments to meet their needs, it can change the environment. <b>Lesson 7</b></p> <p><b>Tigtag</b> <a href="http://www.tigtagcarolina.com">www.tigtagcarolina.com</a></p> <p><b>Pollution; Environment</b></p>			