

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>CORE IDEAS LS2.A Interdependent Relationships in Ecosystems Plants depend on water and light to grow.</p> <p>SCIENCE and ENGINEERING PRACTICES Planning and Carrying Out Investigations Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.</p> <p>CROSSCUTTING CONCEPTS Cause and Effect Events have causes that generate observable patterns.</p>	<p>PERFORMANCE EXPECTATION 2-LS-1 Plan and conduct an investigation to determine if plants need sunlight and water to grow.</p>	<p>RESOURCES: <i>Smithsonian Science and Technology Concepts™ Plant Growth and Development Unit Lessons 1-12</i></p> <p>SUBCONCEPT 1 – Organisms go through distinct stages as part of a process known as the life cycle. Lessons 1-7; 12; 16</p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Reading Selections</i> <i>-Science Notebooking</i> <i>-Student Investigation Guides</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p>Tigtag www.tigtagcarolina.com Green Plants</p>	<p><i>Smithsonian Science and Technology Concepts™</i> Integrated FERA Cycle Instruction of Crosscutting concepts and science and engineering practices with science core ideas</p> <p>FOCUS Strategies include: -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p>EXPLORE Strategies include: -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>REFLECT Strategies include: -Science Notebooking -Key Ideas -Academic Vocabulary</p>	<p>RESOURCES: www.carolinascienceonline.com</p> <ul style="list-style-type: none">Interactive Whiteboard ActivitiesSTC Literacy Series Plant Growth and Development <p>www.tigtagcarolina.com</p> <ul style="list-style-type: none">Video Sets related to Plants; animals, pollination; habitats <p>www.mysi.edu Smithsonian information website</p> <p>DEVICES:</p> <ul style="list-style-type: none">iPadsTabletsChromebooksELMOSMARTboard <p>SOFTWARE:</p> <ul style="list-style-type: none">Microsoft PowerpointMicrosoft WordSMARTboard activities	<p>INTERVENTIONS: <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none">Science NotebooksExtensions <p>ASSESSMENTS: <i>Smithsonian Science and Technology Concepts™</i> Plant Growth and Development Unit</p> <p>Lesson 1 Pre-Assessment <i>Students observe bean seeds and reflect on what they know about plants.</i></p> <p>Lesson 17 Assessment <i>Students discuss and reflect on what they have learned</i> <i>-FORMATIVE</i> <i>-SUMMATIVE</i></p> <p>Science Notebooks</p> <p>Inquiry Data Sheets Investigation Follow-up Questions</p>
	<p>CORE IDEAS LS2.A Interdependent Relationships in Ecosystems Plants depend on animals for pollination or to move their seeds around ETS1.B Developing Possible Solutions Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem’s solutions to other people.</p> <p>SCIENCE and ENGINEERING PRACTICES Developing and Using Models Develop a simple model based on evidence to represent a proposed object or tool.</p> <p>CROSSCUTTING CONCEPTS Structure and Function The shape and stability of structures of natural and designed objects are related to their function(s).</p>	<p>PERFORMANCE EXPECTATION 2-LS2-2 Develop a simple model to mimics the function of an animal in dispersing seeds or pollinating plants.</p>	<p>RESOURCES: <i>Smithsonian Science and Technology Concepts™ Plant Growth and Development Unit Lessons 8-14</i></p> <p>SUBCONCEPT 2 – Living things are interdependent; for example, plants depend on bees for pollination Lessons 8-11 SUBCONCEPT 3 – Models can be used to identify the structures, functions, and behaviors of living organisms. Lesson 13-14</p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Reading Selections</i> <i>-Science Notebooking</i> <i>-Student Investigation Guides</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p>Tigtag www.tigtagcarolina.com Pollination Crafty Orchids</p>	<p>APPLY Strategies include: -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p>COMMON CORE Reading Informational Text RI.1-9: RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p>Writing W.1-9 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>GUIDING QUESTIONS <i>-What do plants need to grow?</i> <i>-How do plants depend on animals?</i> <i>-How can we create designs to mimic interdependent relationships between plants and animals? (pollination, seed dispersal)</i></p>		

Quarter 1 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>CORE IDEAS LS4.D Biodiversity and Humans There are many different kinds of living things in an area, and they exist in different places on land and in water.</p> <p>SCIENCE and ENGINEERING PRACTICES Planning and Carrying Out Investigations Make observations (firsthand or from media) to collect data which can be used to make comparisons.</p> <p>CROSSCUTTING CONCEPTS Patterns Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.</p>	<p>PERFORMANCE EXPECTATION 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.</p>	<p>RESOURCES: <i>Smithsonian Science and Technology Concepts™</i> Plant Growth and Development Unit Lessons 15; 17</p> <p>SUBCONCEPT 4 – Records, notes, and graphs help people understand how plants move through the life cycle and what factors affect their growth and development. Lesson 15; 17</p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Reading Selections</i> <i>-Science Notebooking</i> <i>-Student Investigation Guides</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p>Tigtag www.tigtagcarolina.com Interdependence in a Habitat</p>	<p><i>Smithsonian Science and Technology Concepts™</i> Integrated FERA Cycle Instruction of Crosscutting concepts and science and engineering practices with science core ideas</p> <p>FOCUS Strategies include: -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p>EXPLORE Strategies include: -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>REFLECT Strategies include: -Science Notebooking -Key Ideas -Academic Vocabulary</p> <p>APPLY Strategies include: -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p>COMMON CORE Reading Informational Text RI.1-9: RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p>Writing W.1-9 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>GUIDING QUESTIONS <i>-How do plants and animals in unique places depend upon one another?</i></p>	<p>RESOURCES: www.carolinascienceonline.com</p> <ul style="list-style-type: none">Interactive Whiteboard Activities OrganismsSTC Literacy Series Plant Growth and Development <p>www.tigtagcarolina.com</p> <ul style="list-style-type: none">Video Sets related to Plants; animals, pollination; habitats <p>www.mysi.edu Smithsonian information website</p> <p>DEVICES:</p> <ul style="list-style-type: none">iPadsTabletsChromebooksELMOSMARTboard <p>SOFTWARE:</p> <ul style="list-style-type: none">Microsoft PowerpointMicrosoft WordSMARTboard activities	<p>INTERVENTIONS: <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none">Science NotebooksExtensions <p>ASSESSMENTS: <i>Smithsonian Science and Technology Concepts™</i> Plant Growth and Development Unit</p> <p>Lesson 1 Pre-Assessment <i>Students observe bean seeds and reflect on what they know about plants.</i></p> <p>Lesson 17 Assessment <i>Students discuss and reflect on what they have learned</i> <i>-FORMATIVE</i> <i>-SUMMATIVE</i></p> <p>Science Notebooks</p> <p>Inquiry Data Sheets Investigation Follow-up Questions</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
	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>CORE IDEAS</p> <p>PS1.A Structure and Properties of Matter Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties.</p> <p>SCIENCE and ENGINEERING PRACTICES</p> <p>Planning and Carrying Out Investigations Plan and conduct an investigation collaboratively to produce data to serve as a basis for evidence to answer a question.</p> <p>Analyzing and Interpreting Data Analyze data from tests of an object or tool to determine if it works as intended.</p> <p>Constructing Explanations and Designing Solutions Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.</p> <p>CROSSCUTTING CONCEPTS</p> <p>Patterns Patterns in the natural world and human designed world can be observed.</p> <p>Cause and Effect Simple tests can be designed to gather evidence to support or refute student ideas about causes.</p> <p>Energy and Matter Objects may break into smaller pieces and be put together into larger pieces, or change shape.</p> <p>Influence of Engineering, Technology, and Science, on Society and the Natural World Every human-made product is designed by applying some knowledge of the natural world and is built using natural materials.</p>	<p>PERFORMANCE EXPECTATION</p> <p>2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.</p> <p>2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.</p> <p>2-PS1-3 Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.</p>	<p>RESOURCES: <i>Smithsonian Science and Technology Concepts™</i> Solids and Liquids Unit Lessons 1-17</p> <p>SUBCONCEPT 1 – Some properties of solids and liquids can be identified by careful observation with the senses alone Lessons 1-5</p> <p>SUBCONCEPT 2 –Some properties of solids and liquids can be identified by testing Lessons 6-9</p> <p>SUBCONCEPT 3 –Liquids have unique properties that may be identified by the senses and testing Lessons 10-15</p> <p>SUBCONCEPT 4 –Solids and liquids have both similarities and differences Lessons 16-17</p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Reading Selections</i> <i>-Science Notebooking</i> <i>-Student Investigation Guides</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p>Tigtag www.tigtagcarolina.com Solids, Liquids, Gases -Characteristics of air -Characteristics of water Properties of Materials Natural and Artificial Materials Choosing Suitable Materials</p>	<p><i>Smithsonian Science and Technology Concepts™</i> Integrated FERA Cycle Instruction of Crosscutting concepts and science and engineering practices with science core ideas</p> <p>FOCUS Strategies include: -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p>EXPLORE Strategies include: -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>REFLECT Strategies include: -Science Notebooking -Key Ideas -Academic Vocabulary</p> <p>APPLY Strategies include: -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p>COMMON CORE Reading Informational Text RI.1-9: RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p>Writing W.1-9 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>GUIDING QUESTIONS <i>-How can we describe matter?</i> <i>-How is matter alike and different?</i></p>	<p>RESOURCES: www.carolinascienceonline.com</p> <ul style="list-style-type: none">Interactive Whiteboard ActivitiesSTC Literacy Series Solids and Liquids <p>www.tigtagcarolina.com</p> <ul style="list-style-type: none">Video Sets related to Plants and Animals <p>www.mysi.edu Smithsonian information website</p> <p>DEVICES:</p> <ul style="list-style-type: none">iPadsTabletsChromebooksELMOSMARTboard <p>SOFTWARE:</p> <ul style="list-style-type: none">Microsoft PowerpointMicrosoft WordSMARTboard activities	<p>INTERVENTIONS: <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none">Science NotebooksExtensions <p>ASSESSMENTS: <i>Smithsonian Science and Technology Concepts™</i> The Solids and Liquids Unit</p> <p>Lesson 1 Pre-Assessment <i>Students examine a spoon and a steel ball. They share what they know and would like to know about solids.</i></p> <p>Lesson 16 Assessment <i>Students discuss and reflect on what they have learned</i> <i>-FORMATIVE</i> <i>-SUMMATIVE</i></p> <p>Science Notebooks</p> <p>Inquiry Data Sheets Investigation Follow-up Questions</p>

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	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>CORE IDEAS</p> <p>PS1.B Chemical Reactions Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not.</p> <p>SCIENCE and ENGINEERING PRACTICES Engaging in Argument from Evidence Construct an argument with evidence to support a claim.</p> <p>CROSSCUTTING CONCEPTS Cause and Effect Events have causes that generate observable patterns.</p>	<p>PERFORMANCE EXPECTATION 2-PS1-4 Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.</p>	<p>RESOURCES: <i>Smithsonian Science and Technology Concepts™</i> Changes Unit Lessons 1-17</p> <p>SUBCONCEPT 1 –Materials may change their properties of state Lesson 1</p> <p>SUBCONCEPT 2 –Changes in state result from changes in the external environment Lessons 2-3</p> <p>SUBCONCEPT 3 –Mixed materials may change as the result of chemical or physical interactions Lessons 4-8</p> <p>SUBCONCEPT 4 –The chemical and physical properties of materials may be used to separate their mixtures Lessons 6; 9-11</p> <p>SUBCONCEPT 5 –Chemical reactions can produce new materials Lessons 12-17</p> <p><i>-Inquiry Investigations</i> <i>-STC Literacy Series Reading Selections</i> <i>-Science Notebooking</i> <i>-Student Investigation Guides</i> <i>-Hands-on Equipment</i> <i>-Creating Models</i></p> <p>Tigtag www.tigtagcarolina.com</p> <p>Material Processes -Changes of State -Expansion and Conduction -Insulation -Chemical Reactions -Burning - What is a Mixture? -Separation by Sieving -Separation by Evaporation</p>	<p><i>Smithsonian Science and Technology Concepts™</i> Integrated FERA Cycle Instruction of Crosscutting concepts and science and engineering practices with science core ideas</p> <p>FOCUS Strategies include: -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p>EXPLORE Strategies include: -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>REFLECT Strategies include: -Science Notebooking -Key Ideas -Academic Vocabulary</p> <p>APPLY Strategies include: -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p>COMMON CORE Reading Informational Text RI.1-9: RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p>Writing W.1-9 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>GUIDING QUESTIONS <i>-How do heating and cooling change matter?</i> <i>-How are changes alike and different? (Reversible versus irreversible?)</i> <i>-How can matter be combined and separated?</i></p>	<p>RESOURCES: www.carolinascienceonline.com</p> <ul style="list-style-type: none">Interactive Whiteboard ActivitiesSTC Literacy Series Changes <p>www.tigtagcarolina.com</p> <ul style="list-style-type: none">Material Processes; changes; reactions, mixtures <p>www.mysi.edu Smithsonian information website</p> <p>DEVICES:</p> <ul style="list-style-type: none">iPadsTabletsChromebooksELMOSMARTboard <p>SOFTWARE:</p> <ul style="list-style-type: none">Microsoft PowerpointMicrosoft WordSMARTboard activities	<p>INTERVENTIONS: <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none">Science NotebooksExtensions <p>ASSESSMENTS: <i>Smithsonian Science and Technology Concepts™</i> The Changes Unit</p> <p>Lesson 1 Pre-Assessment <i>Students discuss how familiar objects change.</i></p> <p>Lesson 16 Assessment <i>Students discuss and reflect on what they have learned</i> <i>-FORMATIVE</i> <i>-SUMMATIVE</i></p> <p>Science Notebooks</p> <p>Inquiry Data Sheets Investigation Follow-up Questions</p>

Quarter 4	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>CORE IDEAS ESS1.C The History of Planet Earth Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe</p> <p>SCIENCE and ENGINEERING PRACTICES Constructing Explanations and Designing Solutions Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena</p> <p>CROSSCUTTING CONCEPTS Stability and Change Things may change slowly or rapidly</p>	<p>PERFORMANCE EXPECTATION 2-ESS1-1 Make observations from media to construct an evidence-based account that Earth events can occur quickly or slowly.</p>	<p>RESOURCES: <i>Smithsonian Science and Technology Concepts™ Land and Water Unit Lessons 1-7</i></p> <p>SUBCONCEPT 1 –Different elements of earth systems interact to characterize the land and water landscape Lesson 1 SUBCONCEPT 2 –Water evaporates, rises, condenses, and falls to earth, where it collects in lakes, oceans, rivers, and soil and rocks, in a process known as the water cycle. Lesson 2 SUBCONCEPT 3 –Streams and rivers slowly reshape the earth’s land surface by eroding and carrying soil and rock Lessons 3-7</p> <p>Tigtag www.tigtagcarolina.com Minerals Rocks Soil</p>	<p><i>Smithsonian Science and Technology Concepts™</i> Integrated FERA Cycle Instruction of Crosscutting concepts and science and engineering practices with science core ideas</p> <p>FOCUS Strategies include: -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p>EXPLORE Strategies include: -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>REFLECT Strategies include: -Science Notebooking -Key Ideas -Academic Vocabulary</p> <p>APPLY Strategies include: -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p>COMMON CORE Reading Informational Text RI.1-9: RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p>Writing W.1-9 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>GUIDING QUESTIONS -What events can shape the land? -How do wind and water shape the land?</p>	<p>RESOURCES: www.carolinascienceonline.com</p> <ul style="list-style-type: none">Interactive Whiteboard ActivitiesSTC Literacy Series Land and Water <p>www.tigtagcarolina.com</p> <ul style="list-style-type: none">Video Sets related to land, water, erosion, soils, weathering <p>www.mysi.edu Smithsonian information website</p> <p>DEVICES:</p> <ul style="list-style-type: none">iPadsTabletsChromebooksELMOSMARTboard <p>SOFTWARE:</p> <ul style="list-style-type: none">Microsoft PowerpointMicrosoft WordSMARTboard activities	<p>INTERVENTIONS: <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none">Science NotebooksExtensions <p>ASSESSMENTS: <i>Smithsonian Science and Technology Concepts™</i> Land and Water Unit</p> <p>Lesson 1 Pre-Assessment <i>Students discuss what they know like to know about land and water</i></p> <p>Lesson 17 Assessment <i>Students discuss and reflect on what they have learned</i> -FORMATIVE -SUMMATIVE</p> <p>Science Notebooks</p> <p>Inquiry Data Sheets Investigation Follow-up Questions</p>

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	<p><u>CORE IDEAS</u> ESS2.B Plate Tectonics and Large-Scale System Interactions Maps show where things are located. One can map the shapes and kinds of land and water in any area</p> <p><u>SCIENCE and ENGINEERING PRACTICES</u> Developing and Using Models Develop a model to represent patterns in the natural world</p> <p><u>CROSSCUTTING CONCEPTS</u> Patterns Patterns in the natural world can be observed.</p>	<p><u>PERFORMANCE EXPECTATION</u> 2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area.</p>	<p>RESOURCES: <i>Smithsonian Science and Technology Concepts™</i> Land and Water Unit Lessons 8-17</p> <p>SUBCONCEPT 5 –The interactions among the elements of the earth and circulating water change the landscape. Lessons 8-13</p> <p>SUBCONCEPT 4 –Human interact with natural elements to affect changes in the landscape. Lessons 12; 14-17</p> <p>-Inquiry Investigations -STC Literacy Series Reading Selections -Science Notebooking -Student Investigation Guides -Hands-on Equipment -Creating Models</p> <p>Tigtag www.tigtagcarolina.com Earthquakes Earth’s Layers</p>	<p><i>Smithsonian Science and Technology Concepts™</i> Integrated FERA Cycle Instruction of Crosscutting concepts and science and engineering practices with science core ideas</p> <p>FOCUS Strategies include: -pre-teaching activities such as brainstorming, KWL charts, anticipation guides, etc. -guiding/focus questions</p> <p>EXPLORE Strategies include: -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>REFLECT Strategies include: -Science Notebooking -Key Ideas -Academic Vocabulary</p> <p>APPLY Strategies include: -Venn diagrams, cause and effect charts, review games, engineering application lessons, etc.</p> <p>COMMON CORE Reading Informational Text RI.1-9: RI.1-3 Key Ideas and Details RI.4-6 Craft and Structure RI.7-9 Integration of Knowledge and Ideas</p> <p>Writing W.1-9 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><u>GUIDING QUESTIONS</u> -How can we design solutions to slow or prevent wind and water from changing the land? -Where is water found on earth and in what forms? -</p>	<p>RESOURCES: www.carolinascienceonline.com</p> <ul style="list-style-type: none">Interactive Whiteboard ActivitiesSTC Literacy Series Land and Water <p>www.tigtagcarolina.com</p> <ul style="list-style-type: none">Video Sets related to land, water, erosion, soils, weathering <p>www.mysi.edu Smithsonian information website</p> <p>DEVICES:</p> <ul style="list-style-type: none">iPadsTabletsChromebooksELMOSMARTboard <p>SOFTWARE:</p> <ul style="list-style-type: none">Microsoft PowerpointMicrosoft WordSMARTboard activities	<p>INTERVENTIONS: <i>Smithsonian Science and Technology Concepts™</i></p> <ul style="list-style-type: none">Science NotebooksExtensions <p>ASSESSMENTS: <i>Smithsonian Science and Technology Concepts™</i> Land and Water Unit</p> <p>Lesson 1 Pre-Assessment <i>Students discuss what they know like to know about land and water</i></p> <p>Lesson 17 Assessment <i>Students discuss and reflect on what they have learned</i> -FORMATIVE -SUMMATIVE</p> <p>Science Notebooks</p> <p>Inquiry Data Sheets Investigation Follow-up Questions</p>