

Houston County Schools  
4th Grade AMSTI Science Pacing Guide

<b>First Semester</b> <b>Aug. 6-Dec. 17</b> <b>82 Days</b>  Module (Topic) <b>ALCOS or NSS</b> Minimum Days of Instruction/Assessment Mobymax Alignment Lessons	<b>Second Semester</b> <b>Jan. 4-May 26</b> <b>92 Days</b>  Module (Topic) <b>ALCOS or NSS</b> Minimum Days of Instruction/Assessment Mobymax Alignment Lessons
<p>Energy and Waves (Energy Works) Energy Sources Everywhere: Lesson 1 Investigation A/B: Pre-Unit Assessment: Where Do You Get Your Energy? <b>2</b> <b>1 Class Period (Based on 30 minutes)</b></p> <p>Energy and Waves (Energy Works) Stored and Motion Energy: Lesson 2 Investigation A/B/C: What Are Stored and Motion Energy? How Can I Change the Energy in a Table Tennis Ball? What Happens When Objects Collide? <b>1, 2, 3</b> <b>3 Class Periods (Based on 30 minutes)</b> <b>Forces and Motion</b></p> <p>Energy and Waves (Energy Works) Energy Transfers and Transformations: Lesson 3 Investigation B: How Is the Sun's Energy Transferred? <b>2</b> <b>1 Class Period (Based on 30 minutes)</b> <b>Forces and Motion</b></p> <p>Electric Circuits Lessons 1 &amp; 2 <b>2, 4</b> <b>Electricity</b></p> <p>Energy and Waves (Energy Works) Energy Transfers and Transformations: Lesson 3 Investigation B: How Do You Build an Electric Circuit? <b>2</b> <b>2 Class Periods (Based on 30 minutes)</b> <b>Forces and Motion</b></p> <p>Energy and Waves (Energy Works)</p>	<p>Water and Landforms (Land and Water) Lesson 1-Pre-Unit Assessment: Thinking about Land and Water <b>12, 13, 14, 15, 16, 17</b> <b>**See AMSTI suggested timeline</b></p> <p>Water and Landforms (Land and Water) Lesson 2-The Water Cycle <b>12, 13, 14, 15, 16, 17</b> <b>Earth Science: The Water cycle</b> <b>**See AMSTI suggested timeline</b></p> <p>Water and Landforms (Land and Water) Lesson 3-Modeling Rain on Land <b>12, 13, 14, 15, 16, 17</b> <b>Earth Science: Earth's Water</b> <b>**See AMSTI suggested timeline</b></p> <p>Water and Landforms (Land and Water) Lesson 4-Investigating Streams <b>12, 13, 14, 15, 16, 17</b> <b>Earth Science: Earth's Changing Surface</b> <b>**See AMSTI suggested timeline</b></p> <p>Water and Landforms (Land and Water) Lesson 5-Examining Earth Materials <b>12, 13, 14, 15, 16, 17</b> <b>Earth Science: Earth's Changing Surface</b> <b>**See AMSTI suggested timeline</b></p> <p>Water and Landforms (Land and Water) Lesson 6-Where Does the Water go? Looking Around at Ground Water Runoff <b>12, 13, 14, 15, 16, 17</b> <b>Earth Science: Earth's Changing Surface</b> <b>**See AMSTI suggested timeline</b></p> <p>Water and Landforms (Land and Water) Lesson 7-Where Does the Soil Go? Looking at Erosion and Deposition</p>

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<p>Stored and Motion Energy: Lesson 3 Investigation C: How Can We Use Circuits to Investigate Energy? 3, 4 3 Class Periods (Based on 30 minutes) Forces and Motion</p> <p>Energy and Waves (Energy Works) Energy Transfers and Transformations: Lesson 3 Investigation D: What Have You Learned About Energy? 3 3 Class Period (Based on 30 minutes) Forces and Motion</p> <p>Energy and Waves (Energy Works) Energy Transfers and Transformations: Lesson 3 Investigation D: What Have You Learned About Energy? 2, 4 1 Class Period (Based on 30 minutes) Forces and Motion</p> <p>Energy and Waves (Energy Works) Energy Moves in Waves: Lesson 4 Investigation A/B/C/D: How Can You Use Waves to Send Messages? What Do You Know About Waves? How Can You Create Waves? How Does Energy Move in Waves? 6, 7 4 Class Period (Based on 30 minutes) Forces and Motion</p> <p>****AMSTI Lesson "It's Dark in Here**** 8 Light</p> <p>Energy and Waves (Energy Works) Recycling Energy: Lesson 5 Investigation A/B/C: What Are Types of Alternative Energy? How Does a Wind Turbine Generate Energy? What Can I Build to Demonstrate Water Energy? 5 3 Class Period (Based on 30 minutes) Natural Resources</p>	<p>12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 8-Bird's Eye View: Looking at the Parts of a Stream 12, 13, 14, 15, 16, 17 Earth Science: Earth's Water **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 9-When Streams Join: Modeling Tributaries 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 10-Rushing Rivers: Exploring Flow 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 11-Hills and Rocks: How Nature Changes the Direction and Flow of Water 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 12-Dams: How Humans Change the Direction and Flow of Water 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 13-Exploring Slope 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 14-Plants: Protecting Slope Land from Erosion 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p>
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<p>Energy and Waves (Energy Works) My Energy Experiment: Lesson 6 Investigation A/B/C: How Can I Design an Experiment About Energy? Does My Experiment Support My Prediction? How Can I Communicate What I Have Learned About Energy? 1-8 6 Class Period (Based on 30 minutes)</p>	<p>Water and Landforms (Land and Water) Lesson 15-Planning our Homesites: Designing and Building a Landscape 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 16-Protecting Our Homesites: Testing the Interactions of Land and Water Reading Selection Fallingwater:Wright On! 12, 13, 14, 15, 16, 17 Earth Science: Earth's Changing Surface **See AMSTI suggested timeline</p> <p>Water and Landforms (Land and Water) Lesson 17-Post-Assessment 12, 13, 14, 15, 16, 17 **See AMSTI suggested timeline</p> <hr/> <p>Animal Studies Lessons 1-Pre-Unit Assessment: Thinking About Animals and Their Homes 9, 11 Life Science: The Building Blocks of Life **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 2-Inviting Animals Into the Classroom 9, 11 Life Science: The Building Blocks of Life **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 3-Living in Water:Dwarf African Frogs 9, 11 Life Science: The Building Blocks of Life **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 4-Observing Frogs More Closely 9, 11 Life Science: Classifying Organisms **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 5-Living Where Land and Water Meet: Fiddler Crabs</p>
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	<p>9, 11 Life Science: Classifying Organisms Life Science: Animal Adaptations **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 6-Observing Crabs More Closely 9, 11 Life Science: Classifying Organisms Life Science: Animal Adaptations **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 7-Observing the Behavior of Frogs and Crabs 9, 11 Life Science: Classifying Organisms Life Science: Animal Adaptations **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 8-Living on Land: Millipedes 9, 11 Life Science: Animal Adaptations **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 9-Observing Millipedes More Closely 9, 11 Life Science: Classifying Organisms Life Science: Animal Adaptations **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 10-How Do Animals Respond to a Change in Habitat? 9, 11 Life Science: Changes in Ecosystems **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 11-Observing Humans Closely 9, 11 Life Science: The Human Body **See AMSTI suggested timeline</p> <p>Animal Studies Lessons 12-Researching Animal Behavior 9, 11 Life Science: Animal Adaptations</p>
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	<p><b>**See AMSTI suggested timeline</b></p> <p>Animal Studies Lessons 13-Part 1: What Makes an Animal Special? <b>9, 11</b> <b>Life Science: Classifying Organisms</b> <b>Life Science: Animal Adaptations</b> <b>**See AMSTI suggested timeline</b></p> <p>Animal Studies Lessons 14-Part 2: What Makes an Animal Special? <b>9, 11</b> <b>Life Science: Classifying Organisms</b> <b>Life Science: Animal Adaptations</b> <b>**See AMSTI suggested timeline</b></p> <p>Animal Studies Lessons 15-There's No Place Like Home <b>9, 11</b> <b>Life Science: Classifying Organisms</b> <b>Life Science: Animal Adaptations</b> <b>**See AMSTI suggested timeline</b></p> <p>Animal Studies Lessons 16-Presenting Our Research <b>9, 11</b> <b>**See AMSTI suggested timeline</b></p> <p>Animal Studies Lessons 17-Post Unit Assessment <b>9, 11</b> <b>**See AMSTI suggested timeline</b></p>
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Cycle	Pick Up Date	Return Date
1	8/17/21	10/19/21
2	10/19/21	1/10/22
3	1/10/22	3/15/22
4	3/15/22	5/23/22