

## GRADE FIVE SCIENCE CURRICULUM MAP

	Content	Skills	Assessment	Activities/Resources
<b>August</b>	Fourth Grade Review			(Ongoing resources include the science textbook, BrainPop.com, United Streaming, and Teacher's Domain)
<b>September</b>	Technology and Engineering	<p>T1.1 I identify materials used to accomplish a design task based on a specific property.</p> <p>T1.2 I identify and explain the appropriate materials and tools to construct a given prototype.</p> <p>T1.3 Explain the difference between simple and complex machines</p> <p>T2.1 I identify a problem that reflects the need for shelter, storage, or convenience.</p>	<p>Construct a variety of simple and complex machines using provided materials.</p> <p>Bridge building activity</p> <p>MCAS Shelter question and other appropriate MCAS prep questions.</p>	<p>SI PP with Mrs. Sosik</p> <p>Lego Dacto</p> <p>Design a complex machine using as many simple machines as possible.</p> <p>Shelter building</p>

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<b>October</b>	<p>Life Science</p> <p>Classification of living things</p> <p>Plants</p> <p>Life Cycles</p>	<p>L1 Classify plants and animals according to physical characteristics that they share.</p> <p>L2 I identify structures in plants and their functions</p> <p>L3 Recognize that plants and animals go through predictable life cycles</p> <p>L4 Describe the major stages that characterize the life cycle of the frog and butterfly as they go through metamorphosis.</p>	<p>Appropriate MCAS prep questions</p> <p>Tests and quizzes</p> <p>Performance during activities and labs</p>	<p>Five Kingdoms Booklets</p> <p>Dichotomous keys</p> <p>Growing and observing plants in the classroom</p> <p>Dissecting plants</p> <p>Observing butterfly metamorphosis</p>
<b>November</b>	<p>Life Science</p> <p>Adaptations of living things</p> <p>Learned and instinctive behaviors</p> <p>Energy of living things</p> <p>Inherited traits</p>	<p>L6 Give examples of how inherited characteristics may change over time as adaptations to changes in environment that enable organisms to survive.</p> <p>L7 Give examples of how changes in environment have caused some plants and animals to die or migrate</p> <p>L8 Describe how some organisms meet their needs in an environment by using behaviors in response to stimuli</p> <p>L11 Describe how energy derived from the sun is used by plants and transferred within a food chain</p>	<p>Appropriate MCAS prep questions</p> <p>Tests and quizzes</p> <p>Performance during activities and labs</p> <p>Classroom discussion</p> <p>Endangered Species Project</p>	<p>Norcross</p> <p>Bird to Beak</p> <p>New England Reptiles and Raptors show</p> <p>Build a Nest</p> <p>Create an Animal</p> <p>Endangered Species Project</p>

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<b>December</b>	<p>Earth and Space Science</p> <p>Rocks and Their Properties</p> <p>Soil</p>	<p>E1 Give a simple explanation of what a mineral is and some examples</p> <p>E2 I identify the physical properties of minerals and explain how minerals can be tested for these properties</p> <p>E3 I identify the three categories of rocks based on how they are formed</p> <p>E4 Explain and give examples of the ways in which soil is formed</p> <p>E5 Recognize and discuss the different properties of soil</p>	<p>Appropriate MCAS prep questions</p> <p>Tests and quizzes</p> <p>Performance during activities and labs</p> <p>Classroom discussion</p> <p>Rock Cycle Project</p>	<p>Observe, test, and classify an assortment of minerals</p> <p>Observe, test, and classify an assortment of rocks</p> <p>Rock Cycle Project</p> <p>Observe, test, and classify different types of soil</p>
<b>January</b>	<p>Earth and Space Science</p> <p>Water Cycle</p> <p>Earth's History</p> <p>Solar System</p>	<p>E10 Describe how water on Earth cycles in different forms and in different locations, including underground and the atmosphere</p> <p>E12 Give examples of how the surface of the Earth changes due to slow and rapid processes</p> <p>E13 Recognize that the Earth is part of a system called the solar system</p> <p>E14 Recognize that the Earth revolves around the sun in a year and that the Earth rotates on its axis once approximately every twenty-four hours</p>	<p>Appropriate MCAS prep questions</p> <p>Tests and quizzes</p> <p>Performance during activities and labs</p> <p>Classroom discussion</p> <p>Planet Project</p>	<p>Norcross</p> <p>Water cycle labs</p> <p>Build a sundial</p> <p>Moon phases calendar</p> <p>Planet project</p> <p>Solar system model</p>

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			E15 Describe the changes that occur in the observable shape of the moon over the course of a month		
<b>February</b>		Physical Science States of Matter Properties of Objects and Materials	P1 Differentiate between properties of objects and properties of materials  P2 Compare and contrast solids, liquids, and gases based on the basic properties of each state of matter  P3 Describe how water can be changed from one state to another by adding or taking away heat	Appropriate MCAS prep questions  Tests and quizzes  Performance during activities and labs  Classroom discussion	Classify objects based on their properties. Test to see if predictions were correct.  Centers observing the various states of matter and their properties  Ice cube melting races

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<b>March</b>	Physical Science Forms of Energy Electrical Energy	<p>P4 I identify the basic forms of energy. Recognize that energy is the ability to cause motion or increase change</p> <p>P5 Give examples of how energy can be transferred from one form to another.</p> <p>P6 Recognize that electricity in circuits requires a complete loop through which an electrical current can pass, and that electricity can produce light, sound, and heat.</p> <p>P7 I identify and classify objects and materials that conduct electricity and objects and materials that are insulators of electricity</p> <p>P8 Explain how electromagnets can be made and give examples of how they can be used</p>	<p>Appropriate MCAS prep questions</p> <p>Tests and quizzes</p> <p>Performance during activities and labs</p> <p>Classroom discussion</p>	<p>Design and build a simple roller coaster or other prototype to show changing energy</p> <p>Build simple and series circuits using batteries, bulbs, and wires</p> <p>Given a variety of materials, predict and test which are insulators and which are conductors</p> <p>Build an electromagnet and discuss real world uses</p>
<b>April</b>	Physical Science Magnetic Energy Sound Energy Light Energy Heat Energy	<p>P9 Recognize that magnets have poles that repel and attract each other</p> <p>P10 I identify and classify objects and materials that a magnet will and will not attract</p> <p>P11 Recognize that sound is produced by vibrating objects and requires a medium through which to travel. Relate the rate of</p>	<p>Appropriate MCAS prep questions</p> <p>Tests and quizzes</p> <p>Performance during activities and labs</p> <p>Classroom discussion</p> <p>Energy Project</p>	<p>Test strength, attraction, and repulsion of various magnets</p> <p>Use magnets and iron fillings to create a design on paper</p> <p>Given a variety of materials, predict and test which are magnetic and which are not</p>

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			<p>vibration to pitch and sound</p> <p>P12 Recognize that light travels in a straight line until it strikes an object or travels from one medium to another, and that light can be reflected, refracted, and absorbed</p>		<p>Design musical instruments and use them to demonstrate vibration and pitch</p> <p>Use prisms, flashlights, mirrors, and water to demonstrate reflection, refraction, and absorption</p> <p>Design and build a solar powered "oven" and test which prototype works best</p> <p>Energy Project</p>
<b>May</b>		Review	Review	<p>Appropriate MCAS prep questions</p> <p>Tests and quizzes</p> <p>Classroom discussion</p>	Review

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<b>June</b>					