

## Grade 6 Focus Calendar / Units of Study 2013 - 2014

Science – Grade 6	Unit 1: Measurement	Unit 2: Scientific Method	Unit 3: Matter	Unit 4: Cells & Life Processes	Unit 5: Living Organisms, Classification, & Interactions	Unit 6: Environmental Changes
<b>Key Skills</b>	<ul style="list-style-type: none"> <li>• Measuring and reading/comparing:               <ul style="list-style-type: none"> <li>○ Mass</li> <li>○ Volume</li> <li>○ Length</li> <li>○ Density</li> <li>○ Weight</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Scientific Method process               <ul style="list-style-type: none"> <li>○ Problem/Question</li> <li>○ Research</li> <li>○ Hypothesis</li> <li>○ Materials/Procedure</li> <li>○ Experiment</li> <li>○ Data Analysis</li> <li>○ Conclusion</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Particles of solid, liquid, gas, plasma</li> <li>• Physical/Chemical changes and properties</li> <li>• Pure substances, solute, solvent, compounds, mixtures, solutions</li> <li>• Heterogeneous/homogeneous mixtures</li> </ul>	<ul style="list-style-type: none"> <li>• Life processes: growth, reproduction, energy use, lifespan, exchange of gases, use of water, response to stimuli, elimination of waste</li> <li>• Uni/multicellular</li> <li>• Plant and animal cell parts/functions</li> <li>• Photosynthesis</li> <li>• Cell theory</li> <li>• Diffusion/osmosis</li> </ul>	<ul style="list-style-type: none"> <li>• Biotic/Abiotic factors</li> <li>• Populations/Communities/ Ecosystems</li> <li>• Factors that determine number and type of organisms</li> <li>• Competition effects on resources</li> <li>• Energy transfer in webs/pyramids</li> <li>• Adaptations for survival</li> </ul>	<ul style="list-style-type: none"> <li>• Effects of beneficial and harmful activities or organisms.</li> <li>• Effects of natural environmental changes</li> <li>• Solutions to environmental changes</li> <li>• Renewable/nonrenewable resources</li> </ul>
<b>Academic Vocabulary</b>	<ul style="list-style-type: none"> <li>• Measure</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and describe</li> <li>• Design and conduct</li> <li>• Evaluate</li> <li>• Make suggestions</li> <li>• Use data to support explanations</li> </ul>	<ul style="list-style-type: none"> <li>• Identify</li> <li>• Classify</li> <li>• Describe</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize</li> <li>• Describe</li> <li>• Compare/Contrast</li> </ul>	<ul style="list-style-type: none"> <li>• Diagram &amp; describe</li> <li>• Describe</li> <li>• Compare/Contrast</li> <li>• Recognize</li> <li>• Identify</li> <li>• Competition</li> <li>• Predict possible effects</li> </ul>	<ul style="list-style-type: none"> <li>• Describe</li> <li>• Predict the impact of changes</li> </ul>
<b>Reading /Writing Skills</b>	<ul style="list-style-type: none"> <li>• Writing steps</li> </ul>	<ul style="list-style-type: none"> <li>• Writing paragraphs</li> <li>• Research</li> <li>• Writing a question</li> </ul>	<ul style="list-style-type: none"> <li>• Compare/Contrast</li> <li>• Venn Diagrams</li> <li>• Writing Summaries</li> </ul>	<ul style="list-style-type: none"> <li>• Compare/Contrast</li> <li>• Sequencing</li> </ul>	<ul style="list-style-type: none"> <li>• Compare/Contrast</li> <li>• Making Predictions</li> </ul>	<ul style="list-style-type: none"> <li>• Persuasive Writing</li> <li>• Prediction</li> <li>• Constructed Response</li> <li>• Cause/Effect</li> </ul>
<b>Math Skills</b>	<ul style="list-style-type: none"> <li>• Measuring and reading/comparing:               <ul style="list-style-type: none"> <li>○ Mass</li> <li>○ Volume</li> <li>○ Length</li> <li>○ Density</li> <li>○ Weight</li> </ul> </li> <li>• Metric Conversions</li> <li>• Subtraction</li> <li>• Graphs/data tables</li> </ul>	<ul style="list-style-type: none"> <li>• Graphs</li> <li>• Data tables</li> <li>• Mean (Average)</li> </ul>	<ul style="list-style-type: none"> <li>• Division</li> <li>• Multiplication</li> <li>• Subtraction</li> <li>• Using Rulers</li> </ul>	<ul style="list-style-type: none"> <li>• Conservation of mass</li> <li>• Chemical equations</li> </ul>	<ul style="list-style-type: none"> <li>• Reading diagrams</li> </ul>	<ul style="list-style-type: none"> <li>• Reading graphs</li> <li>• Percents in the energy pyramid</li> <li>• Data tables</li> </ul>

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<b>Power Standards/ GLEs Assessed</b>	7.1.B.b.c.d	7.1.A.a.b.c.d	1.1.A.a.b.c.d 1.1.D.a	3.1.A.a 3.1.C 3.2.A	4.1.A.a 4.1.B.b.c 4.1.D.b.c	4.1.D.a-c
<b>Labs</b>	<ul style="list-style-type: none"> <li>• Measuring/reading:               <ul style="list-style-type: none"> <li>○ Length</li> <li>○ Density</li> <li>○ Weight</li> <li>○ Volume</li> <li>○ Mass</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Surface tension of water on a penny</li> </ul>	<ul style="list-style-type: none"> <li>• Physical/Chemical changes</li> <li>• Separating mixtures</li> </ul>	<ul style="list-style-type: none"> <li>• Microscope: looking at cheek and onion cells</li> </ul>	<ul style="list-style-type: none"> <li>• Owl pellets?</li> </ul>	<ul style="list-style-type: none"> <li>• Erosion</li> </ul>
<b>Approximate Instruction Dates</b>	3-4 weeks	4-5 weeks	4-5 weeks	3-4 weeks	5-7 weeks	2-3 weeks

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Science – Grade 6	Unit 7: Earth’s Processes, Interactions, and Landforms	Unit 8: Rocks, Soils, & Fossils	Unit 9: Light & Sound	Unit 10:	Unit 11:	Unit 12:
<b>Key Skills</b>	<ul style="list-style-type: none"> <li>• Plate tectonics (convergent, divergent, transform)</li> <li>• Landforms create at each boundary</li> <li>• Slow/abrupt changes</li> </ul>	<ul style="list-style-type: none"> <li>• Soil layers</li> <li>• Formation of sedimentary rocks</li> <li>• Superposition of rock layers</li> <li>• Fossil formation</li> <li>• Changes on Earth and its environment</li> <li>• Compare and contrast fossil location</li> </ul>	<ul style="list-style-type: none"> <li>• Reflection/Refraction by various surfaces</li> <li>• Property of light</li> <li>• Sound waves</li> <li>• Translucent, transparent, opaque, light colors, and pigment colors</li> <li>• Convex/concave</li> </ul>			
<b>Academic Vocabulary</b>	<ul style="list-style-type: none"> <li>• Describe</li> <li>• Identify</li> </ul>	<ul style="list-style-type: none"> <li>• Making inferences</li> <li>• Using evidence to support data</li> </ul>	<ul style="list-style-type: none"> <li>• Compare/Contrast</li> <li>• Predict</li> <li>• Describe</li> </ul>			
<b>Reading /Writing Skills</b>	<ul style="list-style-type: none"> <li>• Cause/Effect</li> <li>• Constructed response</li> <li>• Draw conclusions</li> </ul>	<ul style="list-style-type: none"> <li>• Making inferences</li> <li>• Compare/Contrast</li> </ul>	<ul style="list-style-type: none"> <li>• Compare/Contrast</li> <li>• Predicting</li> </ul>			
<b>Math Skills</b>	<ul style="list-style-type: none"> <li>• Probability</li> <li>• Ratios/proportions</li> </ul>	<ul style="list-style-type: none"> <li>• Timelines</li> </ul>	<ul style="list-style-type: none"> <li>• Angles</li> </ul>			
<b>Power Standards/ GLEs Assessed</b>	5.2.A.c.d 5.2.B.a	5.2.A.a 5.2.D.b	1.2.A.a-h 1.2.A.i-k 1.2.C.a.			
<b>Labs</b>	<ul style="list-style-type: none"> <li>• Model of convection currents</li> </ul>	<ul style="list-style-type: none"> <li>• Making fossils</li> </ul>	<ul style="list-style-type: none"> <li>• Reflection/refraction</li> </ul>			
<b>Approximate Instruction Dates</b>	4-5 weeks	3-4 weeks	2 weeks			