

## 5<sup>th</sup> Grade Practice Science MEAP Review Resources

<b>Directions</b>	<p>1. Take the practice MEAP test. (Take both part 1 and 2 found on DataDirector) <a href="#">Click to view directions for finding assessments and printing bubble sheets in DataDirector.</a></p> <p>2. Analyze practice test data and choose lessons to teach or web resources to use.</p> <p>*Highlighted GLCEs are the most frequently missed concepts and should have more time spent reviewing.</p> <p>*Use the key concepts to write questions as students explore the websites either in class or for homework. To use for a 15 minute review, ask questions from the key concepts list or MEAP practice test. Use the web resources to verify student answers.</p> <p>K-4<sup>th</sup> Grade Companion Document from MDE:  <a href="http://www.mi.gov/documents/mde/K-4_Science_GLCE_Companion_Document_v.1.09_2_264479_7.pdf">http://www.mi.gov/documents/mde/K-4_Science_GLCE_Companion_Document_v.1.09_2_264479_7.pdf</a></p>	
GLCE	Lesson Resource	Web Resource
<p>S.IP.04.13            S.IP.04.16  <b>S.IA.04.11</b>  <b>S.IA.04.12</b>            S.IA.04.13            S.IA.04.15            S.RS.04.11            S.RS.04.14  <b>S.RS.04.15</b>  <b>S.RS.04.18</b>            L.OL.03.32  <b>L.EV.03.12</b>            L.EV.04.22</p>	<p>Teacher Lesson Plan: <a href="#">Virtual Peppered Moths</a>            Student Journal Pages: <a href="#">Virtual Peppered Moths</a>            3 Day Lesson</p> <p><b>Key Concepts for Relationships and Requirements of Living Things</b></p> <ul style="list-style-type: none"> <li>• Plants and animals have basic requirements for maintaining life, which include the need for air, water, and source of energy (food).</li> <li>• Organisms have observable traits and physical characteristics that help them survive and reproduce in their environments.</li> <li>• Organisms are a part of a food chain or food web where food/energy is supplied by plants, which need light to produce food/energy.</li> </ul>	<p><b>Peppered Moths Interactive</b>  <a href="http://www.biologycorner.com/worksheets/pepperedmoth.html">http://www.biologycorner.com/worksheets/pepperedmoth.html</a></p> <p><b>Observable traits and physical characteristics</b>  <a href="http://www.mbgnet.net">http://www.mbgnet.net</a></p> <p><b>Survive and reproduce in their environments</b>  <a href="http://sciencenetlinks.com/media/filer/2011/10/07/evolution.swf">http://sciencenetlinks.com/media/filer/2011/10/07/evolution.swf</a></p> <p><b>Food Chain</b>  <a href="http://magma.nationalgeographic.com/ngexplorer/0309/quickflicks/index.html">http://magma.nationalgeographic.com/ngexplorer/0309/quickflicks/index.html</a></p> <p><b>Fossils</b>  <a href="http://www.fossilsforkids.com">http://www.fossilsforkids.com</a></p>

	<ul style="list-style-type: none"> <li>Plants and animals can be classified by observable traits and physical characteristics.</li> <li>Fossils provide evidence that life forms have changed over time and were influenced by changes in environmental conditions</li> </ul>	
<p>S.IP.04.11  S.IA.04.11  S.IA.04.15  S.RS.04.11  S.RS.04.14  S.RS.04.15  P.FM.03.35  P.FM.03.36  P.FM.03.37  P.FM.03.38</p>	<p>Teacher Lesson Plan: <a href="#">Force and Motion</a>  Student Journal Pages <a href="#">Force and Motion</a>  3 day lesson  <b>Key Concepts for Change in Motion</b></p> <ul style="list-style-type: none"> <li>The position of the observer and object affect the description of motion.</li> <li>Forces are pushes and pulls.</li> <li>Gravity is the force that pulls objects to the Earth.</li> <li>Motion is affected by the strength of the force and the mass of the object.</li> </ul>	<p><b>Force and mass of objects</b>  <a href="http://www.bbc.co.uk/schools/scienceclips/ages/10_11/forces_action.shtml">http://www.bbc.co.uk/schools/scienceclips/ages/10_11/forces_action.shtml</a></p> <p><b>Friction and Talk about Gravity</b>  <a href="http://www.bbc.co.uk/schools/scienceclips/ages/8_9/friction.shtml">http://www.bbc.co.uk/schools/scienceclips/ages/8_9/friction.shtml</a></p>
<p>S.IP.04.11  S.IP.04.13  S.IP.04.14  S.IA.04.11  S.RS.04.11  S.RS.04.15  P.EN.03.31  P.EN.03.32</p>	<p>Teacher Lesson Plan: <a href="#">Sound</a>  Student Journal Pages: <a href="#">Sound</a>  3 day lesson  <b>Key Concepts for Light and Sound</b></p> <ul style="list-style-type: none"> <li>Light and sound are forms of energy.</li> <li>Light and sound can be described by their properties.</li> <li>Light travels in a straight path.</li> <li>Vibrations produce sound.</li> </ul>	<p><b>Sound waves as energy and properties</b>  <a href="http://www.scienceworld.ca/flash_games/lever.html">http://www.scienceworld.ca/flash_games/lever.html</a> go to the sound game</p> <p><b>Vibrations produce sound</b>  <a href="http://www.bbc.co.uk/schools/scienceclips/ages/9_10/c_hanging_sounds.shtml">http://www.bbc.co.uk/schools/scienceclips/ages/9_10/c_hanging_sounds.shtml</a></p>

## WEB RESOURCES FOR OTHER GLCEs

<p>EN.03.11</p> <p>PM.03.51</p> <p>PM.03.52</p>	<p><b><u>Light &amp; Sound</u></b></p> <p>Light and Sound As Energy</p> <p>Materials are heated more than others by light</p> <p>Need light to see objects: light reflects</p>	<p><b>Light and sound as energy</b></p> <p><a href="http://www.sciencemuseum.org.uk/onlinestuff/games/energy_flows.aspx">http://www.sciencemuseum.org.uk/onlinestuff/games/energy_flows.aspx</a></p> <p><a href="http://www.need.org/needpdf/infobook_activities/ElemInfo/IntroE.pdf">http://www.need.org/needpdf/infobook_activities/ElemInfo/IntroE.pdf</a></p> <p><b>Heated by light</b></p> <p><a href="http://www.ehow.com/info_8118565_science-effect-color-heat-absorption.html">http://www.ehow.com/info_8118565_science-effect-color-heat-absorption.html</a> (easy quick experiment - 1 hour lesson)</p> <p><b>Reflection</b></p> <p><a href="http://www.scienceworld.ca/flash_games/lever.html">http://www.scienceworld.ca/flash_games/lever.html</a> go to the light game</p>
<p>Review all GLCES under that unit</p>	<p><b>Key Concepts for Structures and Functions of Living Things (3<sup>rd</sup> Grade)</b></p> <ul style="list-style-type: none"><li>• Plant and animal structures have specific functions.</li><li>• Plants and animals can be classified by observable characteristics.</li><li>• Plants and animals have observable characteristics that allow them to live and survive in their environment.</li></ul>	<p><b>Plants and Animals</b></p> <p><a href="http://classroom.jc-schools.net/sci-units/plants-animals.htm">http://classroom.jc-schools.net/sci-units/plants-animals.htm</a></p>

Review all GLCES under that unit	<p><b>Key Concepts for Heat, Electricity and Magnetism (4<sup>th</sup> Grade)</b></p> <ul style="list-style-type: none"> <li>• Heat and electricity are forms of energy.</li> <li>• Evidence of energy is change.</li> <li>• Electrical circuits demonstrate a transfer of energy.</li> <li>• Magnetism is a physical property of matter.</li> <li>• Heat can be transferred from one substance or object to another</li> </ul>	<p><b>Electromagnets</b>  <a href="http://www.harcourtschool.com/activity/electromagnets">http://www.harcourtschool.com/activity/electromagnets</a>  <a href="http://phet.colorado.edu/en/simulation/faraday">http://phet.colorado.edu/en/simulation/faraday</a></p>
Review all GLCES under that unit	<p><b>Key Concepts for Properties and Changes of Matter (4<sup>th</sup> Grade)</b></p> <ul style="list-style-type: none"> <li>• All objects have physical properties that can be measured.</li> <li>• Matter exists in different states.</li> <li>• Matter can change from one state to another by heating and cooling.</li> </ul>	<p><b>States change by heating and cooling</b>  <a href="http://www.harcourtschool.com/activity/states_of_matter">http://www.harcourtschool.com/activity/states_of_matter</a></p>
Review all GLCES under that unit	<p><b>Key Concepts for Sun, Moon, and Earth (4<sup>th</sup> Grade)</b></p> <ul style="list-style-type: none"> <li>• The moon and the Earth move in a predictable pattern around the sun.</li> <li>• The predictable patterns of the Earth and moon define a day, year, and moon phases.</li> <li>• The sun appears to move in a predictable pattern across the sky.</li> </ul>	<p><b>Seasons</b>  <a href="http://astro.unl.edu/naap/motion1/animations/seasons_ecliptic.swf">http://astro.unl.edu/naap/motion1/animations/seasons_ecliptic.swf</a></p> <p><b>Predictable Patterns</b>  <a href="http://highered.mcgraw-hill.com/olcweb/cgi/pluginpop.cgi?it=swf::800::600::sites/dl/free/0072482621/78778/Lunar_Nav.swf::Lunar%20Phases%20Interactive">http://highered.mcgraw-hill.com/olcweb/cgi/pluginpop.cgi?it=swf::800::600::sites/dl/free/0072482621/78778/Lunar_Nav.swf::Lunar%20Phases%20Interactive</a></p>
Review all GLCES under that unit	<p><b>Key Concepts for Earth Materials, Change, and Resources (3<sup>RD</sup> Grade)</b></p> <ul style="list-style-type: none"> <li>• The Earth has natural resources that are</li> </ul>	<p><b>Renewable/Non-renewable</b>  <a href="http://www.fossweb.com/modules3-6/Water/activities/resourceid.html">http://www.fossweb.com/modules3-6/Water/activities/resourceid.html</a></p>

	<p>renewable or non-renewable.</p> <ul style="list-style-type: none"> <li>• Humans are dependent on and affect their environments in helpful and harmful ways.</li> <li>• The Earth’s surface changes through slow processes and fast processes.</li> <li>• Earth materials have useful properties and can enhance the quality of life.</li> </ul>	<p><b>Earth’s surface: slow and fast processes</b>  <a href="http://sciencenetlinks.com/tools/shape-it-up">http://sciencenetlinks.com/tools/shape-it-up</a></p> <p><b>Misconception</b>  <a href="http://beyondpenguins.ehe.osu.edu/issue/earths-changing-surface/common-misconceptions-about-weathering-erosion-volcanoes-and-earthquakes">http://beyondpenguins.ehe.osu.edu/issue/earths-changing-surface/common-misconceptions-about-weathering-erosion-volcanoes-and-earthquakes</a></p>
<p>Review all GLCES under that unit</p>	<p><b><u>Key Concepts for 2<sup>nd</sup> Grade</u></b></p> <p><b>Measurement of Properties</b></p> <ul style="list-style-type: none"> <li>• Objects and substances can be described by their properties and through measurement.</li> <li>• Objects and substances can be classified as single substances or mixtures and single substances can be combined to make mixtures.</li> </ul> <p><b>Plant Life</b></p> <ul style="list-style-type: none"> <li>• Plants need air, water, and sunlight to survive.</li> <li>• Plants have a life cycle that includes seed, seedling or young plant, adult plant, flower, fruit and seed.</li> <li>• Plants have characteristics that are passed from the parent plant.</li> </ul> <p><b>Earth’s Surface Features</b></p> <ul style="list-style-type: none"> <li>• Earth surface has many major landform types.</li> </ul> <p><b>Uses and Properties of Water</b></p> <ul style="list-style-type: none"> <li>• Water can come from a variety of sources.</li> <li>• Water has a variety of uses.</li> <li>• Water on Earth can be described as a solid or liquid</li> </ul>	<p><a href="http://www.scholastic.com/play/root.htm">http://www.scholastic.com/play/root.htm</a>  <a href="http://www.songsforteaching.com/bananaslugstringband/rootsstemsleaves.htm">http://www.songsforteaching.com/bananaslugstringband/rootsstemsleaves.htm</a></p>