

**Science/Unit Map – Grade 4 – Trimester 1**

**Trimester Focus:** Relationships and Requirements of Living Things

**Big Ideas:**

- Plants and animals have basic requirements for maintaining life which include the need for air, water and a source of energy.
- Organisms have observable traits and physical characteristics that help them survive and reproduce in their environments.
- 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.
- Plants and animals can be classified by observable traits and physical characteristics.
- Fossils provide evidence that life forms have changed over time and were influenced by changes in environmental conditions.

<b>GLCEs</b>	<b>Vocabulary</b>	<b>Resources</b> (See Curriculum Calendar for Details)	<b>Assessments</b>
<p><b>L.OL.04.15</b> Determine that plants require air, water, light, and a source of energy and building material for growth and repair.</p> <p><b>L.OL.04.16</b> Determine that animals require air, water and a source of energy and building material for growth and repair.</p> <p><b>L.EV.04.21</b> Identify individual differences (color, leg length, size, wing size, leaf shape) in organisms of the same kind.</p> <p><b>L.EV.04.22</b> Identify how variations in physical characteristics of individual organisms give them an advantage for survival and reproduction.</p> <p><b>L.EC.04.11</b> Identify organisms as part of a food chain or food web.</p> <p><b>L.EC.04.21</b> Explain how environmental changes can produce a change in the food web.</p> <hr/> <p><b>E.ST.04.31</b> Explain how fossils provide evidence of Earth’s past.</p> <p><b>E.ST.04.32</b> Compare and contrast life forms found in fossils and organisms that exist today.</p>	<p>plants animals source of energy building material requirements for life repair individual differences organisms observable features enable obtain coloring similarities and differences in organisms camouflage predator prey litter food chain food web producers consumers decomposers populations environment affect survival reproduce</p> <hr/> <p>fossil evidence variations physical characteristics survival</p>	<p><b>Textbook:</b> National Geographic - Life Science</p> <p>Optional - Chapter 1 – Lessons 2, 4, 7, 8, &amp;11 (Basic Needs of Plants) Optional - Chapter 2 – Lessons 3, 4, 5, &amp; 9 (Basic Needs of Animals) Chapter 3 - All Lessons (Environmental Dependence) Chapter 4 –Skip lesson 1 (Adaptations) Chapter5 - All Lessons (Environmental Interaction)</p> <p>*Go back to ch.4 in Life Science book &amp; do lesson 1 &amp; 8 as an introduction to fossils</p> <p><b>Textbook:</b> National Geographic - Earth Science Chapter 2 – pgs. 61, 74, 84-91 (Fossils)</p> <p><b>Supplemental Texts:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Digging Into the Ice Age</a></li> <li>• <a href="#">Excavating a Castle</a></li> <li>• <a href="#">Uncovering Earth’s History</a></li> </ul> <p><b>Inquiry book:</b> See Inquiry Book for Snap, Explore, Directed, Guided, and Open Investigations</p>	<p><u>Formative Assessment Examples</u> The formative assessment is the information that you collect as you complete the activities. These activities should drive instruction.</p> <ul style="list-style-type: none"> <li>• Choose one plant or animal and write a paragraph explaining how it is adapted to survive in its environment.</li> <li>• Create a food chain and a food web that includes water flea, sunfish and heron.</li> <li>• Create a food chain that includes at least three animals.</li> </ul> <p><u>Summative Assessment Examples</u></p> <ul style="list-style-type: none"> <li>• Draw or construct an environment for an imaginary animal that meets all of its needs. Identify and describe how the organism’s needs are met.</li> <li>• Create a food chain for your imaginary animal, include at least one producer, and 2-3 consumers. Your animal’s environment has had a fire. How might this effect the survival of your animal?</li> </ul> <p>Paragraph using supporting evidence about teeth to determine the size and type of consumer.</p> <hr/> <p><u>Formative Assessment Examples</u></p> <ul style="list-style-type: none"> <li>• Paragraph supporting decisions made about the fossil teeth.</li> <li>• Discuss the scenario based on animal interaction evidenced through tracks.</li> <li>• Review the numbers on the table from the dinosaur size activity; and review the dinosaur ranking by size.</li> </ul>

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