

**Youngstown City Schools
Grade 4 Science Pacing Guide
Grading Period 2**

Strand/ Content Statement	Duration	Clear Learning Targets	Curriculum Resources	Vocabulary/Concepts
<p>LIFE SCIENCE (4.LS.1)</p> <p>Changes in an organism's environment are sometimes beneficial to its survival and sometimes harmful.</p>	<p>Weeks 1-3</p>	<p>-explain that some changes in an environment can be beneficial and some changes can be detrimental to different organisms in an ecosystem.</p> <p>- observe and record factors in an environment.</p> <p>- compare an ecosystem in Ohio from the past to the present.</p> <p>-create a plan to benefit an endangered species in Ohio.</p> <p>- evaluate a plan proposed to help an endangered species.</p>	<p><u>Curriculum Units:</u></p> <ul style="list-style-type: none"> • The Good, The Bad, and the Beautiful, Ecosystems <p><u>Science Textbook:</u> MacMillan</p> <p><u>Discovery Education:</u></p> <ul style="list-style-type: none"> • - http://www.discoveryeducation.com <p><u>Ohio Department of Education - Science:</u> http://education.ohio.gov/Topics/Ohio-s-New-Learning-Standards/Science</p> <p>AIR Practice Site</p>	<p>Abiotic Beneficial Biotic Detrimental Ecosystem Fossil Record Migration Populations Resources</p>

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<p style="text-align: center;">LIFE SCIENCE (4.LS.2)</p> <p>Fossils can be compared to one another and to present-day organisms according to their similarities and differences.</p>	<p style="text-align: center;">Weeks 4-6</p>	<p>"I Can..."</p> <ul style="list-style-type: none"> - explain how fossils are used to learn about organisms that no longer exist. - compare fossils to other fossils and living organisms to identify similarities and differences. - design and carryout an experiment to discover how organisms can leave fossil evidence. - infer possible facts about organisms and their environment based on observations of fossils or models of fossils. 	<p><u>Curriculum Units:</u></p> <ul style="list-style-type: none"> • No Bones About It <p><u>Science Textbook:</u> MacMillan</p> <p><u>Discovery Education:</u></p> <ul style="list-style-type: none"> • http://www.discoveryeducation.com <p><u>Other Resources:</u></p> <ul style="list-style-type: none"> • additional experiments for making fossils. http://www.brighthub.com/environment/science-environmental/articles/122335.aspx • <u>LeBreaTarpitsvirtualfield trip</u> http://www.tarpits.org/la-brea-tar-pits/timeline • <u>Fossil museum</u> http://www.fossilmuseum.net/museum-fossils.htm <p><u>Ohio Department of Education - Science:</u> http://education.ohio.gov/Topics/Ohio-s-New-Learning-Standards/Science</p> <p>AIR Practice Site</p>	<p>Abiotic Biotic Cast Ecosystem Extinct Fossil Record Migration Mold Populations Resources Trace</p>
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<p>PHYSICAL SCIENCE (4.PS.1)</p> <p>The total amount of matter is conserved when it undergoes a change.</p>	<p>Weeks 7-9</p>	<p>"I Can..."</p> <ul style="list-style-type: none"> -based on experimental experiences, explain that matter remains constant when it undergoes a change. - explain that when an object is broken into smaller pieces, the total amount of matter remains constant. - explain that when a solid is dissolved in a liquid, the total amount of matter remains constant. - explain that when matter changes state (solid, liquid, gas), the total amount of matter remains constant. - explain that the sum of all of the parts in an object equals the mass of the object. 	<p><u>Curriculum Units:</u></p> <ul style="list-style-type: none"> • Conservation of Matter <p><u>Science Textbook:</u> MacMillan</p> <ul style="list-style-type: none"> • Chapter 5, Lesson 1, pages 210-217. <p><u>Discovery Education:</u></p> <ul style="list-style-type: none"> • - http://www.discoveryeducation.com <p><u>Ohio Department of Education - Science:</u> http://education.ohio.gov/Topics/Ohio-s-New-Learning-Standards/Science</p> <p><u>AIR Practice Site</u></p>	<p>Conservation of Matter Constant Dissolving Evaporation Experimental Evidence Gas Liquid Mass Melting Phase change Phases or States of Matter Matter Property Solid Volume Weight</p>
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