

Readorium Alignment to FOSS Kit-Food and Nutrition		
Readorium Books By Standard	Magazine Articles (A) and Science Alive Videos (V) By Standard	Teacher Resource Center Classroom Strategy Lessons (CL) with Articles (A) by Standard
<p><b>NGSS: LS1.C From Molecules to Organisms: Structures and Processes: Organization for Matter and Energy Flow in Organisms:</b> Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion. (secondary to 5-PS3-1)</p> <p>Plants acquire their material for growth chiefly from air and water. (5-LS1-1)</p>		
<p><b>NGSS: 5-LS2.A. Ecosystems: Interactions, Energy, and Dynamics: Interdependent Relationships in Ecosystems:</b> The food of</p>		
<ul style="list-style-type: none"> <li>• Improving Lives with Assistive Technology</li> <li>• Living in Space</li> <li>• Olympic Champs: It's Not Just Luck – It's Physics!</li> <li>• On the Move with Transportation Technology</li> <li>• Powering Our Lives with Energy</li> <li>• Science - What's it All About?</li> <li>• Solving Crime with Forensics</li> <li>• Technology Changes Medicine</li> </ul>	<ul style="list-style-type: none"> <li>• Amazing Teen Scientist (A)</li> <li>• A Computer's Best Friend (A)</li> <li>• Why Are Some Hands More "Handy" Than Others? (A)</li> <li>• Mysteries of the Common Cold (A)</li> <li>• Breathe Easier - Understanding Asthma (A)</li> <li>• All About Recycling(A)</li> <li>• Shrimp Farming: A Shocking Environment (A)</li> </ul>	<ul style="list-style-type: none"> <li>• Graphic Features (CL-2, A-1 War Machines-Siege Engines)</li> </ul>
<p><b>NGSS: 5-ESS2.A. Earth's Systems: Earth Materials and Systems:</b> Earth's major systems are the geosphere (solid and molten rock, soil and sediments), the hydrosphere (water and ice), the atmosphere (air), and the biosphere (living things, including humans). These systems interact in multiple ways to affect Earth's surface materials and processes. The ocean supports a variety of ecosystems and organisms, shapes landforms, and influences climate. Winds and clouds in the atmosphere interact with the landforms to determine patterns of weather. (5-ESS-2-1)</p>		
<ul style="list-style-type: none"> <li>• Earth's Systems</li> <li>• Polluting Our Earth</li> </ul>	<ul style="list-style-type: none"> <li>• The Water Cycle (A)</li> <li>• All about Recycling (A)</li> <li>• Rocks Rock! (A)</li> <li>• When Lightning Strikes (V)</li> <li>• What is Sea Ice and Why is it Shrinking?(V)</li> <li>• Earthquakes (V)</li> <li>• Our Own Star, the Sun (A)</li> <li>• Treasures in the Sky (A)</li> <li>• Our Galactic Neighborhood (A)</li> <li>• The Future of the Sun (A)</li> </ul>	
<p><b>NGSS: 5-ESS3.C Earth and Human Activity: Human Impacts on Earth Systems:</b> Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments. (5-ESS3-1)</p>		

<ul style="list-style-type: none"> <li>• Changing Face of Earth</li> <li>• Earth's Systems</li> <li>• Exploring the Ocean's Depths</li> <li>• Invasive Species</li> <li>• Natural Hazards that Shape the Earth</li> <li>• Our Planet Earth</li> <li>• Polluting Our Earth</li> <li>• Powering Our Lives with Energy</li> </ul>	<ul style="list-style-type: none"> <li>• All About Recycling (A)</li> <li>• A Computer's Best Friend (A)</li> <li>• Earthquakes (V)</li> <li>• Robotic Arms (V)</li> <li>• Debris Filling the Ocean(V)</li> </ul>	<ul style="list-style-type: none"> <li>• Click or Clunk (CL-1, A-1 Why Save Rainforests?)</li> <li>• Click or Clunk (CL-2, A-1 Illegal Wildlife Trade)</li> <li>• Click or Clunk (CL-2, A-2 Garbage Island)</li> </ul>
<p><b>NGSS: 5-PS3.D. Energy: Energy in Chemical Processes and Everyday Life:</b> The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water). (5-PS3-1)</p>		
<ul style="list-style-type: none"> <li>• Dependency of Life, The</li> <li>• Weird and Wonderful World of Plants</li> </ul>	<ul style="list-style-type: none"> <li>• Biotechnology (A)</li> <li>• A Sweet Treat (A)</li> </ul>	
<p><b>NGSS: 5-ETS1.A. Engineering Design: Defining and Delimiting an Engineering Problem:</b> Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account. (3-5-ETS101) (secondary to 4-PS3-4)</p>		
<ul style="list-style-type: none"> <li>• Computer Revolution</li> <li>• Deep Space</li> <li>• Earth's Systems</li> <li>• Exploring the Ocean's Depths</li> <li>• Improving Lives with Assistive Technology</li> <li>• Living in Space</li> <li>• Making Movie Magic</li> <li>• Olympic Champs: It's Not Just Luck – It's Physics!</li> <li>• On the Move with Transportation Technology</li> <li>• Powering Our Lives with Energy</li> <li>• Tech Changes Medicine</li> </ul>	<ul style="list-style-type: none"> <li>• Amazing Teen Scientist (A)</li> <li>• The Science of Movie Stunts (A)</li> <li>• Cool Beams! (A)</li> <li>• Robotic Arms (V)</li> <li>• The SpelBots (V)</li> <li>• Look, a Rainbow (A)</li> </ul>	
<p><b>NGSS: 5-ETS1.B. Engineering Design: Developing Possible Solutions</b> Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. (3-5-ETS1-2)</p> <p>At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and shared ideas can lead to improved designs. (3-5-ETS1-2)</p> <p>Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved. (3-5-ETS1-3)</p>		
<ul style="list-style-type: none"> <li>• Improving Lives with Assistive Technology</li> <li>• Living in Space</li> <li>• Olympic Champs: It's Not Just Luck – It's Physics!</li> </ul>	<ul style="list-style-type: none"> <li>• Amazing Teen Scientist (A)</li> <li>• A Computer's Best Friend (A)</li> <li>• Why Are Some Hands More "Handy" Than Others? (A)</li> <li>• Mysteries of the Common Cold (A)</li> <li>• Breathe Easier - Understanding Asthma (A)</li> </ul>	<ul style="list-style-type: none"> <li>• Graphic Features (CL-2, A-1 War Machines-Siege Engines)</li> </ul>

<ul style="list-style-type: none"> <li>• On the Move with Transportation Technology</li> <li>• Powering Our Lives with Energy</li> <li>• Science - What's it All About?</li> <li>• Solving Crime with Forensics</li> <li>• Technology Changes Medicine</li> </ul>	<ul style="list-style-type: none"> <li>• All About Recycling(A)</li> <li>• Shrimp Farming-A Shocking Environmental Tale (A)</li> </ul>	
<p><b>NGSS: 5-ETS1.C. Engineering Design: Optimizing the Design Solution:</b> Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (3-5-ETS1-3) (secondary to 4-PS4-3)</p>		
<ul style="list-style-type: none"> <li>• Science - What's It All About?</li> </ul>	<ul style="list-style-type: none"> <li>• Biotechnology (A)</li> <li>• Cancer: Cells Out of Control</li> <li>• Twin Fascination(A)</li> <li>• Virtual Reality Scientists (V)</li> <li>• RoboBees (V)</li> <li>• Robotic Arms (V)</li> <li>• The SpelBots (V)</li> </ul>	