

Readorium Alignment to FOSS Kit-Interdependent Relationships in Ecosystems		
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>NGSS: 6-8-LS2.C: Ecosystems: Interactions, Energy, and Dynamics: Ecosystems Dynamics, Functioning, and Resilience: Ecosystems are dynamic in nature; their characteristics can vary over time. Disruptions to any physical or biological component of an ecosystem can lead to shifts in all its populations. (MS-LS2-4)</p> <p>Biodiversity describes the variety of species found in Earth’s terrestrial and oceanic ecosystems. The completeness or integrity of an ecosystem’s biodiversity is often used as a measure of its health.</p>		
<ul style="list-style-type: none"> • Prairie Ecosystems 	<ul style="list-style-type: none"> • Artificial Reefs: How and Why We Build Them (A) • Garbage Island (A) 	<ul style="list-style-type: none"> • Determining Importance (CL-2, A-2 Garbage Island) • Monitor for Meaning (CL-1, A-2 Reflections on Dead Wood)
<p>NGSS: 6-8-LS4.C: Ecosystems: Biological Evolution: Unity and Diversity: Adaptation: Adaptation by natural selection acting over generations is one important process by which species change over time in response to changes in environmental conditions. Traits that support successful survival and reproduction in the new environment become more common; those that do not become less common. Thus, the distribution of traits in a population changes. (MS-LS4-6)</p>		
<ul style="list-style-type: none"> • Surviving in Nature 	<ul style="list-style-type: none"> • The Very Peculiar Anglerfish (A) 	
<p>NGSS: 6-8-ETS1.A: Engineering Design: Defining and Delimiting an Engineering Problem: The more precisely a design task’s criteria and constraints can be defined, the more likely it is that the designed solution will be successful. Specification of constraints includes consideration of scientific principles and other relevant knowledge that is likely to limit possible solutions. (MS-ETS1-4) (secondary to MS-PS-1-6)</p>		
<ul style="list-style-type: none"> • Artificial Satellites • Character Traits of a Good Scientist • Learning from Natural Disasters • Pollution 	<ul style="list-style-type: none"> • Inventor of the Toughest Stuff (A) • Antlers, Beaks, Geckos and Us (V) • Safe from Tsunamis (V) • An Amazing Teen Scientist (A) 	<ul style="list-style-type: none"> • Context Clues (CL-3 A-1 Things That Go Boom!) • Determining Importance (CL-2, A-1. Dragonflies: Flying Aces)
<p>NGSS: 6-8-ETS1.B: Engineering Design: Developing Possible Solutions: A solution needs to be tested, and then modified based on the test results, to improve it. (MS-ETS1-4) (secondary to MS-PS1-6)</p> <p>There are systematic processes for evaluating solutions with respect to how well they meet criteria and constraints of a problem. (MS-ETS1-2), (MS-ETS1-3) (secondary to MS-PS3-3) (secondary to MS-LS2-5)</p> <p>Sometimes parts of different solutions can be combined to create a solution that is better than any of its predecessors (MS-ETS1-3)</p> <p>Models of all kinds are important for testing solutions. (MS-ETS1-4)</p>		
<ul style="list-style-type: none"> • Superstition or Science 	<ul style="list-style-type: none"> • Things That Go BOOM!: The History and Chemistry of Explosives (A) • Crazy Careers in Science (A) • Space psychologist (A) • From Waste to Energy: Bacteria Gives a Boost(V) • Hydrogen Power(V) • Wave of Future- Green Gasoline (V) • Pig Poop & Other Energy Sources (V) • Getting Ready for Earthquakes (V) • Chores Don't Have to be a Pain in the But...ler (V) • Musical Computer (V) • Robots of Your Dreams(V) 	<ul style="list-style-type: none"> • Context Clues (CL-3 A-1 Things That Go Boom!)

	<ul style="list-style-type: none"> • Robots with Whiskers (V) • Sensible Sensors (V) • Signing Made Simple (V) • Smart Cars! (V) • The Ins and Outs of the Brain (V) • Strong & Sensitive: Metal Foam (V) • Smart Helicopters (V) • X-Ray Vision: Beyond the Bones (V) • Picking Your Brain (V) • The Creative Brain (V) • The Good, Bad, and Baby (V) • What Makes Us Tick (V) • Locked-in Syndrome: (V) • Nanoparticles: Tiny Glowing Cancer Killers (V) • Tongue Driven (V) • Vision for Blind People - Fact or Fiction(V) • Extreme Bacteria (V) • Lord of the Tree Rings (V) • Coral Corrosion (V) • Disappearing Frogs (V) • Earthworm Invasion (V) • ESP: A Lab in a Can (V) • Flowing Free (V) • Virtual Wildfires (V) • Women Powered Robots (V) • Wave of the Future: Clean Ocean Energy (V) • A Computer’s Best Friend(A) 	
<p>NGSS: 6-8-ETS1.c: Engineering Design: Optimizing the Design Solution: Although one design may not perform the best across all tests, identifying the characteristics of the design that performed the best in each test can provide useful information for the redesign process-that is, some of the characteristics may be incorporated into the new design. (MS-ETS1-3) (secondary to MS-PS1-6)</p>		
<ul style="list-style-type: none"> • Microscopes • Space Race • Superstition or Science 	<ul style="list-style-type: none"> • Do Scientists Cheat? (A) 	