Readorium Alignment with FOSS Kit : Sun, Moon and Stars		
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**
NGSS: 1-ESS1.A. **Earth's Place in the Universe: The Universe and Its Stars**: When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet other move into the transformed environment, and some die (secondary to 3-LS-4)		
• Deep Space	• A Trip to Mars (A) • Aurora Borealis: The Glowing Lights (A) • Catching a Comet (A) • Our Own Star, the Sun (A) • Our Galactic Neighborhood(A) • Spirit & Opportunity on Mars (A) • Strange Stars (A) • The Biggest Shadow of All: A Solar Eclipse (A) • The Challenge of Gravity(A) • The Future of the Sun(A) • Treasures in the Sky(A) • Voyager Space Probes(A) • Where Did the Planets Come From?(A) • Black Holes (V)	• Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys) • Questioning (CL-1, A-1 White-Throated Capuchins)
NGSS: 1-ESS1.B. **Earth's Place in the Universe: Earth and the Solar System**: Seasonal patterns of sunrise and sunset can be observed, described, and predicted. (1-ESS1-2)		
	• A Trip to Mars (A) • Aurora Borealis: The Glowing Lights (A) • Catching a Comet (A) • Our Own Star, the Sun (A) • Our Galactic Neighborhood(A) • Spirit & Opportunity on Mars (A) • Strange Stars (A) • The Biggest Shadow of All: A Solar Eclipse (A) • The Challenge of Gravity(A) • The Future of the Sun(A) • Treasures in the Sky(A) • Voyager Space Probes(A) • Where Did the Planets Come From?(A) • Black Holes (V)	• Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys) • Questioning (CL-1, A-1 White-Throated Capuchins)
NGSS: 2-ESS1.C. **Earth's Place in the Universe: The History of the Planet Earth**: Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe. (2-ESS1-1)		
• Changing Face of Earth • Earth's Systems	• All About Recycling (A) • A Computer's Best Friend (A)	• Click or Clunk (CL-1, A-1 Why Save Rainforests?)

• Exploring the Ocean's Depths • Invasive Species • Natural Hazards that Shape the Earth • Our Planet Earth • Polluting Our Earth • Powering Our Lives with Energy	• Rocks Rock! (A) • The Water Cycle (A) • Debris Filling the Ocean(V) • Earthquakes (V) • Robotic Arms (V) • When Lightning Strikes (V) • What is Sea Ice and Why is it Shrinking?(V)	• Click or Clunk (CL-2, A-1 Illegal Wildlife Trade) • Click or Clunk (CL-2, A-2 Garbage Island)
NGSS: 3-ESS2.D. Earth's Systems: Weather and Climate: Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. (3-ESS2-1)		
• Exploring the Ocean's Depths • Weather Around the World	• Aurora Borealis: The Glowing Lights (A) • Biggest Shadow of All: A Solar Eclipse (A) • When Lightning Strikes (V) • Our Own Star, the Sun (A) • Too Much Water! (A)	• Author's Purpose (CL-1, A-1 Weather Scientist) • Inferring (CL-1, A-1 What Causes Seasons?) • Graphic Features (CL-1, A-3 Climate Changing)
NGSS: 3-ESS3.B. Earth and Human Activity: Natural Hazards: A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1) (Note: This Disciplinary Core Idea is also addressed by 4-ESS3-2)		
• Natural Hazards	• Too Much Water! (A)	
NGSS: 3-PS2.A. Motion and Stability: Forces and Interactions: Forces and Motion: Each force acts on one particular object and has both strength and a direction. An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. Forces that do not sum to zero can cause changes in the object's speed or direction of motion. (Boundary: Qualitative and conceptual, but not quantitative addition of forces is used at this level.) (3-PS2-1) The patterns of an object's motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it. (Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity, are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed.) (3-PS2-2)		
• Amusement Park Physics • Changing Face of Earth, The • Deep Space • Olympic Champs: It's Not Just Luck – It's Physics! • Unbalanced Forces	• A Magnet Experiment (A) • A River of Ice (A) • Adventures of Messy Magnet (A) • Fishing for Staples: A Magnetic Drama Magnificent Magnets (A) • Making Hovercrafts (A) • Simple Machines: Fun Facts and Riddles (A)	
NGSS: 3-ETS1.A. Engineering and Design: Defining and Delimiting an Engineering Problem: 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-ETS1-1) (secondary to 4-PS3-4)		
• Computer Revolution • Deep Space • Earth's Systems • Exploring the Ocean's Depths	• The Science of Jelly Beans(A) • Amazing Teen Scientist (A) • The Science of Movie Stunts (A) • Cool Beams! (A) • Robotic Arms (V)	• Word Learning (CL-1, A-1 Introduction to Archeology) • Word Learning (CL-1, A-2 How Archeologists Work)

• Improving Lives with Assistive Technology • Living in Space • Making Movie Magic • Olympic Champs: It's Not Just Luck – It's Physics! • On the Move with Transportation Technology • Powering Our Lives with Energy • Technology Changes Medicine	• The SpelBots (V)	• Word Learning (CL-1, A-3 The Archeology Lab)
NGSS: 3-ETS1.B. Engineering and Design: Developing Possible Solutions: 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) 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) 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)		
• Improving Lives with Assistive Technology • Living in Space • Olympic Champs: It's Not Just Luck – It's Physics! • On the Move with Transportation Technology • Powering Our Lives with Energy • Science - What's it All About? • Solving Crime with Forensics • Technology Changes Medicine	• Amazing Teen Scientist (A) • A Computer's Best Friend (A) • Why Are Some Hands More "Handy" Than Others? (A) • Mysteries of the Common Cold (A) • Breathe Easier - Understanding Asthma (A) • All About Recycling(A) • Shrimp Farming: A Shocking Environment (A)	• Graphic Features (CL-2, A-1 War Machines-Siege Engines)
NGSS: 3-ETS1.C. Engineering and Design: Optimizing the Design Solution: 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)		
• Science - What's It All About?	• Biotechnology (A) • Virtual Reality Scientists (V) • Cancer: Cells Out of Control • RoboBees (V) • Twin Fascination(A) • Robotic Arms (V) • The SpelBots (V)	