

Readorium Alignment to TEKS Content Standards in Science

The first 4 categories of Texas Essential Knowledge and Skills in Science have to do with scientific investigations and reasoning. Because Readorium is content-based, the following chart shows the alignment of Readorium content to TEKS content requirements in Matter and Energy; Force, Motion and Energy; Earth and Space; and Organisms and Environments.

Readorium Alignment to TEKS Content Standards in Science: Grade 3		
Matter and Energy		
<p>Texas Essential Knowledge and Skills for Science (TEKS): Matter and Energy: matter has measurable physical properties and those properties determine how matter is classified, changed, and used</p> <p>5A. Measure, test and record physical properties of matter, including temperature, mass, magnetism, and ability to sink and float</p> <p>5B. Describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container</p> <p>5C. Predict, observe, and record changes in the state of matter caused by heating or cooling</p> <p>5D. Explore and recognize that a mixture is created when two materials are combined such as gravel, and sand and metal and plastic paper clips</p>		
Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by
<ul style="list-style-type: none"> • Food Chemistry • Making Movie Magic • Science Girls • Science- What's it All About? • Solving Crimes with Forensics • Unbalanced Forces 	<ul style="list-style-type: none"> • A River of Ice (A) • Adventures of Messy Magnet (A) • Fishing for Staples (Magnetic Drama) (A) • How to Make a Cartesian Diver (A) • Magnetic Experiment (A) • Magnificent Magnets (A) • Make Your Own Rock Candy (A) • Making Hovercrafts (A) • Matter Matters! (A) • Rocks Rock! (A) • Science of Jelly Beans (The) (A) • Science of Movie Stunts (The) (A) • Splash (A) • Water Cycle (The) (A) • Wonder Fabrics - Things that Can't get Wet! (A) 	<ul style="list-style-type: none"> • Graphic Features (CL-1, A-1 Global Climate Change)

Readorium Alignment to TEKS Content Standards in Science: Grade Three Continued

Force, Motion and Energy

Texas Essential Knowledge and Skills for Science (TEKS): forces cause change and that energy exists in many forms

6A. Explore different forms of energy, including mechanical, light, sound, and heat/thermal in everyday life

6B. Demonstrate and observe how position and motion can be changed by pushing and pulling objects to show work being done such as swings, balls, pulleys, and wagons

6C. Observe forces such as magnetism and gravity acting on objects

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Amusement Park Physics ● Changing Face of Earth (The) ● Deep Space ● Good Vibes- Making Waves with Sounds ● Making Movie Magic ● Olympic Champs: It's Not Just Luck – It's Physics! ● On the Move with Transportation Technology ● Science Girls ● Science of Music (The) ● Unbalanced Forces 	<ul style="list-style-type: none"> ● Adventures of Messy Magnet (A) ● Aurora Borealis: The Glowing Lights (A) ● Cool Beams! (A) ● Fishing for Staples (Magnetic Drama) (A) ● How to Make a Cartesian Diver(A) ● Look a Rainbow! Where Did that Come From? (A) ● Magnetic Experiment (A) ● Magnificent Magnets (A) ● Make Your Own Rock Candy (A) ● Making Hovercrafts (A) ● Our Own Star, the Sun (A) ● Raise Your Voice (A) ● Spirit and Opportunity on Mars (A) ● Splash (A) ● Treasures in the Sky(A) ● The Science of Movie Stunts (A) ● The Water Cycle (A) ● Where Did the Planets Come From? (A) 	<ul style="list-style-type: none"> ● Graphic Features (CL-1, A-2 Greenhouse Effect) ● Inferring (CL-1, A-3 Why Is the Sky Blue?) ●Text Organization (CL-1, A-2 How do Satellites Stay in Space?)

Readorium Alignment to TEKS Content Standards in Science: Grade Three Continued

Earth and Space:

Texas Essential Knowledge and Skills for Science (TEKS): Earth consists of natural resources and its surface is constantly changing

- 7A. Explore and record how soils are formed by weathering of rock and the decomposition of plant and animal remains
- 7B. Investigate rapid changes in Earth’s surface such as volcanic eruptions, earthquakes, and landslides
- 7C. Identify and compare different landforms, including mountains, hills, valleys and plains
- 7D. Explore the characteristics of natural resources that make them useful in products and materials such as clothing and furniture and how resources may be conserved

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Changing Face of the Earth (The) ● Earth's Systems ● Natural Hazards ● Polluting Our Earth 	<ul style="list-style-type: none"> ● All About Recycling(A) ● Amazing Teen Scientist (A) ● Matter Matters!(A) ● River of Ice (A) ● Rocks Rock! (A) ● Splash (A) ● Too Much Water (A) ● Water Cycle (A) ● Where Did the Planets Come From? (A) ● Earthquakes (V) ● Hawaii Volcanoes (V) ● Tsunami Research (V) ● When Lightning Strikes (V) 	<ul style="list-style-type: none"> ●Word Learning (CL-1, A-1 Introduction to Archeology) ●Word Learning (CL-1, A-2 How Archaeologists Work) ●Word Learning (CL-1, A-3 The Archeology Lab) ● Author's Purpose (CL-1, A-3 Tornado) ● Click or Clunk (CL-1, A-1 Why Save Rainforests?)

Readorium Alignment to TEKS Content Standards in Science: Grade Three Continued

Earth and Space

Texas Essential Knowledge and Skills for Science (TEKS): **There are recognizable patterns in the natural world and among objects in the sky**

- 8A. Observe, measure, record and compare day-to-day weather changes in different locations at the same time that include air temperature, wind direction and precipitation
- 8B. Describe and illustrate the Sun as a star composed of gases that provides light and heat energy for the water cycle
- 8C. Construct models that demonstrate the relationship of the Sun, Earth, and Moon, including orbits and positions
- 8D. Identify the planets in Earth's solar system and their position in relation to the Sun

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Changing the Face of Earth ● Deep Space ● Earth's Systems ● Living in Space ● Our Planet Earth ● Weather Around the World 	<ul style="list-style-type: none"> ● A River of Ice (A) ● A Trip to Mars (A) ● Aurora Borealis: The Glowing Lights (A) ● Biggest Shadow of All, A Solar Eclipse (A) ● Catching a Comet (A) ● Future of the Sun (A) ● Look a Rainbow! Where Did that Come From? (A) ● Our Galactic Neighborhood (A) ● Our Own Star, the Sun (A) ● Spirit and Opportunity on Mars (A) ● Strange Stars (A) ● Surfaces and Eclipses of the Moon (A) ● Treasures in the Sky(A) ● Voyager Space Probes (A) 	<ul style="list-style-type: none"> ● Author's Purpose (CL-1, A-3 Tornado) ● Author's Purpose (CL-1, A-1 Weather Scientist) ● Questioning (CL-2, A-1 Crazy Careers in Science) ● Text Organization (CL-1, A-1 What Is a Satellite?) ● Text Organization (CL-1, A-3 How Satellites Work) ● Text Organization (CL-1, A-2 How do Satellites Stay in Space?) ● Inferring (CL-1, A-2 What is a Planet?)

Readorium Alignment to TEKS Content Standards in Science: Grade Three Continued

Organisms and Environments

Texas Essential Knowledge and Skills for Science (TEKS): **organisms have characteristics that help them survive and can describe patterns, cycles, systems and relationships within the environment**

9A. Observe and describe the physical characteristics of environments and how they support populations and communities within an ecosystem

9B. Identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the ecosystem such as removal of frogs from a pond or bees from a field

9C. Describe environmental changes such as floods and droughts where some organisms thrive and others perish or move to new locations

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Birds of a Feather ● Buzzing about Bees and Wasps ● Dependency of Life (The) ● Exploring Ecosystems ● Exploring the Ocean’s Depths ● Inheritance, It’s All in the Genes ● Invasive Species ● Natural Hazards ● Secret Language of Animals (The) 	<ul style="list-style-type: none"> ● Amazing Water Bear (A) ● Batty for Bats (A) ● Bee-bee-havior (A) ● Beluga Whales (A) ● Beneath the Fin (A) ● Breathe Easier - Understanding Asthma (A) ● Carnivorous Dinosaurs (A) ● Cicada Swarm (A) ● Emperor Penguins (A) ● Evolution of the Peppered Moth (A) ● Fireflies if the Ocean (A) ● Herbivorous Dinosaurs (A) ● How Spiders Catch Prey (A) ● How Plants Survive (Parts 1 and 2) ● Interesting and Funny Animal Relationships (A) ● Invasion of the Earthworms (A) ● Polar Bears (A) ● Raise Your Voice (A) ● Arctic Krill (A) ● Leaf Cutter Ants (V) ● RoboBees (V) 	<ul style="list-style-type: none"> ● Click or Clunk (CL-1, A-1 Why Save Rainforests?) ● Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys)

	<ul style="list-style-type: none">● Shrimp Farming: A Shocking Environment (A)● Symbiotic Relationship of a Goby and a Shrimp (A)● Social Insects (A)● Tigers and Lions (A)● Tsunami Research● Twin Fascination (A)● Venus Flytrap (A)● Walruses (A)● Weird Animal Defense Mechanisms (A)● Why Dandelions are Dandy (A)● Animals of Ice (V)● Invasion of the Earthworms (V)	<ul style="list-style-type: none">●
--	--	---

Readorium Alignment to TEKS Content Standards in Science: Grade Three Continued

Organisms and Environments

Texas Essential Knowledge and Skills for Science (TEKS): **Organisms and environments: organisms undergo similar life processes and have structures that help them survive within their environments.**

10A. Explore how structures and functions of plants and animals allow them to survive in a particular environment

10B. Explore that some characteristics of organisms are inherited such as the number of limbs on an animal or flower color and recognize that some behaviors are learned in response to living in a certain environment such as animals using tools to get food

10C. Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and ladybugs

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Beetlemania ● Birds of a Feather ● Buzzing About Bees and Wasps ● Deadliest Creatures ● Deep Sea Creatures ● Dependency of Life (The) ● Exploring Ecosystems ● Exploring the Ocean’s Depths ● How We Learn ● Inheritance, It’s All in the Genes ● Invasive Species ● Life and Death in the Wild ● Our Gross World ● Our Planet Earth ● Smarter Than You think, Animals that Amaze ● Spider Stories ● Weird and Wonderful World of Plants 	<ul style="list-style-type: none"> ● A Sweet Treat (A) ● Bee-bee-havior (A) ● Beneath the Fin (A) ● Brain: What’s in There (The)? (A) ● Breathe Easier - Understanding Asthma (A) ● Cancer Cells Out of Control (A) ● Carnivorous Dinosaurs (A) ● Cicada Swarm (A) ● Excuse Me, But Burping is Natural (A) ● Fireflies of the Ocean (A) ● How Do We Think? (A) ● How Spiders Catch Prey (A) ● Lion in Waiting (A) ● Mysteries of the Common Cold (A) ● Raise Your Voice (A) ● Interesting & Funny Animal Relationships (A) ● Leaf Cutter Ants(V) ● Monkey Business (V) ● Orangutan Copycats (V) ● Venus Flytrap: A Meat Eating Plant (A) ● Weird Animal Defense Mechanisms (A) ● Why Are Some Hands are Handier (A) ● Why Dandelions are Dandy (A) 	<ul style="list-style-type: none"> ● Click or Clunk (CL-2, A-3 The Venomous Sea Wasp) ● Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys) ● Main Idea/Details (CL-2, A-2 Animals of Panama) ● Main Idea/Details (CL-3, A-1 Camels) ● Main Ideas/Details (CL-4, A-3 Why Hair Turns Grey?) ● Questioning (CL-1, A-1 White-Throated Capuchins) ● Questioning (CL-1, A-2 Agoutis) ● Questioning (CL-1, A-3 Sloths) ● Questioning (CL-2, A-2 Vampires in Nature) ● Questioning (CL-2, A-3 Parasites: Nature's Thieves)

Readorium Alignment to TEKS Content Standards in Science

The first 4 categories of Texas Essential Knowledge and Skills in Science have to do with scientific investigations and reasoning. Because Readorium is content based, the following chart shows the alignment of Readorium content to TEKS content requirements in Matter and Energy; Force, Motion and Energy; Earth and Space; and Organisms and Environments.

Readorium Alignment to TEKS Content Standards in Science: Grade 4		
Matter and Energy		
<p>Texas Essential Knowledge and Skills for Science (TEKS): Matter and Energy: matter has measurable physical properties and those properties determine how matter is classified, changed, and used</p> <p>5A. Measure, compare, and contrast physical properties of matter, including size, mass, volume, states (solid, liquid, gas), temperature, magnetism, and the ability to sink or float</p> <p>5B. Predict the changes caused by heating and cooling such as ice becoming liquid water and condensation forming on the outside of a glass of ice water</p> <p>5C. Compare and contrast a variety of mixtures and solutions such as rocks in sand, sand in water, or sugar in water</p>		
Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles
<ul style="list-style-type: none"> • Food Chemistry • Making Movie Magic • Science Girls • Science→ What's it All About? • Solving Crimes with Forensics • Unbalanced Forces 	<ul style="list-style-type: none"> • Adventures of Messy Magnet (A) • Fishing for Staples (Magnetic Drama) (A) • How to Make a Cartesian Diver (A) • Magnetic Experiment (A) • Magnificent Magnets (A) • Make Your Own Rock Candy (A) • Making Hovercrafts (A) • Matter Matters! (A) • River of Ice (A) • Rocks Rock! (A) • Science of Jelly Beans (The) (A) • Science of Movie Stunts (The) (A) • Splash (A) • Water Cycle (The) (A) • Wonder Fabrics - Things that Can't get Wet! (A) 	<ul style="list-style-type: none"> • Graphic Features (CL-1, A-1 Global Climate Change)

Readorium Alignment to TEKS Content Standards in Science: Grade Four Continued

Force, Motion and Energy

Texas Essential Knowledge and Skills for Science (TEKS): Force, Motion and Energy: Energy exists in many forms and can be observed in cycles, patterns, and systems

- 6A.** Differentiate among forms of energy, including mechanical, sound, electrical, light, and heat/thermal
- 6B.** Differentiate between conductors and insulators
- 6C.** Demonstrate that electricity travels in a closed path, creating an electrical circuit, and explore an electromagnetic field
- 6D.** Design an experiment to test the effect of force on an object such as a push or a pull, gravity, friction, or magnetism 6C. Observe forces such as magnetism and gravity acting on objects

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Amusement Park Physics ● Changing Face of Earth (The) ● Deep Space ● Good Vibes- Making Waves with Sounds ● Making Movie Magic ● Olympic Champs: It's Not Just Luck – It's Physics! ● On the Move with Transportation Technology ● Science Girls ● Science of Music (The) ● Unbalanced Forces 	<ul style="list-style-type: none"> ● Adventures of Messy Magnet (A) ● Aurora Borealis: The Glowing Lights (A) ● Cool Beams! (A) ● Fishing for Staples (Magnetic Drama) (A) ● How to Make a Cartesian Diver(A) ● Look a Rainbow! Where Did that Come From? (A) ● Magnetic Experiment (A) ● Magnificent Magnets (A) ● Make Your Own Rock Candy (A) ● Making Hovercrafts (A) ● Our Own Star, the Sun (A) ● Raise Your Voice (A) ● Spirit and Opportunity on Mars (A) ● Splash (A) ● Treasures in the Sky(A) ● The Science of Movie Stunts (A) ● The Water Cycle (A) ● Where Did the Planets Come From? (A) 	<ul style="list-style-type: none"> ● Graphic Features (CL-1, A-2 Greenhouse Effect) ● Inferring (CL-1, A-3 Why Is the Sky Blue?) ● Text Organization (CL-1, A-2 How do Satellites Stay in Space?)

Readorium Alignment to TEKS Content Standards in Science: Grade Four Continued

Earth and Space

Texas Essential Knowledge and Skills for Science (TEKS): Earth and Space: Earth consists of useful resources and its surface is constantly changing

7A. Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants

7B. Observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice

7C. Identify and classify Earth's renewable resources, including air, plants, water, and animals; and nonrenewable resources, including coal, oil, and natural gas; and the importance of conservation.

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Changing Face of the Earth (The) ● Earth's Systems ● Natural Hazards ● Polluting Our Earth 	<ul style="list-style-type: none"> ● All About Recycling(A) ● Amazing Teen Scientist (A) ● Matter Matters!(A) ● River of Ice (A) ● Rocks Rock! (A) ● Splash (A) ● Too Much Water (A) ● Water Cycle (A) ● Where Did the Planets Come From? (A) ● Earthquakes (V) ● Hawaii Volcanoes (V) ● Tsunami Research (V) 	<ul style="list-style-type: none"> ●Word Learning (CL-1, A-1 Introduction to Archeology) ●Word Learning (CL-1, A-2 How Archaeologists Work) ●Word Learning (CL-1, A-3 The Archeology Lab) ● Author's Purpose (CL-1, A-3 Tornado) ● Click or Clunk (CL-1, A-1 Why Save Rainforests?)

Readorium Alignment to TEKS Content Standards in Science: Grade Four Continued

Earth and Space

Texas Essential Knowledge and Skills for Science (TEKS): Earth and Space: The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system.

8A. Measure and record changes in weather and make predictions using weather maps, weather symbols, and a map key

8B. Describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process

8C. Collect and analyze data to identify sequences and predict patterns of change in shadows, tides, seasons, and the observable appearance of the Moon over time

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Changing the Face of Earth ● Earth's Systems ● Weather Around the World 	<ul style="list-style-type: none"> ● Aurora Borealis: The Glowing Lights (A) ● Biggest Shadow of All, A Solar Eclipse (A) ● Future of the Sun (A) ● Look a Rainbow! Where Did that Come From? (A) ● Our Own Star, the Sun (A) ● River of Ice (A) ● Splash (A) ● Surfaces and Eclipses of the Moon (A) ● Water Cycle (A) ● Where Did the Planets Come From? (A) 	<ul style="list-style-type: none"> ● Author's Purpose (CL-1, A-1 Weather Scientist) ● Inferring (CL-1, A-2 What Causes Seasons?)

Readorium Alignment to TEKS Content Standards in Science: Grade Four Continued

Organisms and Environments

Texas Essential Knowledge and Skills for Science (TEKS): **Organisms and Environments: Living organisms within an ecosystem interact with one another and with their environment.**

9A. Investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food

9B. Describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web such as a fire in a forest.

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Birds of a Feather ● Buzzing about Bees and Wasps ● Dependency of Life (The) ● Exploring Ecosystems ● Exploring the Ocean’s Depths ● Inheritance, It’s All in the Genes ● Invasive Species ● Natural Hazards ● Secret Language of Animals (The) 	<ul style="list-style-type: none"> ● Amazing Water Bear (A) ● Arctic Krill (A) ● Batty for Bats (A) ● Bee-bee-havior (A) ● Beluga Whales (A) ● Beneath the Fin (A) ● Breathe Easier - Understanding Asthma (A) ● Carnivorous Dinosaurs (A) ● Cicada Swarm (A) ● Emperor Penguins (A) ● Evolution of the Peppered Moth (A) ● Fireflies if the Ocean (A) ● Herbivorous Dinosaurs (A) ● How Spiders Catch Prey (A) ● How Plants Survive (Parts 1 and 2) ● Interesting and Funny Animal Relationships (A) ● Invasion of the Earthworms (A) ● Polar Bears (A) ● Raise Your Voice (A) ● Leaf Cutter Ants (V) ● RoboBees (V) 	<ul style="list-style-type: none"> ● Click or Clunk (CL-1, A-1 Why Save Rainforests?) ● Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys) ● Author's Purpose (CL-1, A-3 Tornado)

Readorium Alignment to TEKS Content Standards in Science: Grade Four Continued

Organisms and Environments

Texas Essential Knowledge and Skills for Science (TEKS): **Organisms and environments: organisms undergo similar life processes and have structures that help them survive within their environments.**

10A. Explore how adaptations enable organisms to survive in their environment such as comparing birds' beaks and leaves on plants

10B. Demonstrate that some likenesses between parents and offspring are inherited, passed from generation to generation such as eye color in humans or shapes of leaves in plants. Other likenesses are learned such as table manners or reading a book and seals balancing balls on their noses.

10C. Explore, illustrate, and compare life cycles in living organisms such as butterflies, beetles, radishes, or lima beans

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Beetlemania ● Birds of a Feather ● Buzzing About Bees and Wasps ● Deep Sea Creatures ● Dependency of Life (The) ● Exploring Ecosystems ● Exploring the Ocean's Depths ● Inheritance, It's All in the Genes ● Invasive Species ● Life and Death in the Wild ● Our Gross World ● Our Planet Earth ● Smarter Than You Think, Animals that Amaze ● Spider Stories ● Weird and Wonderful World of Plants 	<ul style="list-style-type: none"> ● Bee-bee-havior (A) ● Biotechnology (A) ● Crime Scene Science (A) ● Evolution of the Peppered Moth (A) ● Hair Time!(A) ● How Do We Think? (A) ● Lion in Waiting (A) ● Science Pirates - Wash Your Hands (V) ● The Symbiotic Friendship of a Goby and a Shrimp (A) ● Twin Fascination (A) ● Why Are Some Hands More "Handy" Than Others? (A) ● Antarctic Krill (V) ● Orangutan Copycats (V) 	<ul style="list-style-type: none"> ● Click or Clunk (CL-2, A-3 The Venomous Sea Wasp) ● Main Idea/Details (CL-3, A-1 Camels) ● Main Idea/Details (CL-2, A-2 Animals of Panama) ● Main Idea/Details (CL-4, A-3 Why Hair Turns Grey?) ● Questioning (CL-1, A-1 White-Throated Capuchins) ● Questioning (CL-1, A-2 Agoutis) ● Questioning (CL-1, A-3 Sloths) ● Questioning (CL-2, A-2 Vampires in Nature) ● Questioning (CL-2, A-3 Parasites: Nature's Thieves)

Readorium Alignment to TEKS Content Standards in Science

The first 4 categories of Texas Essential Knowledge and Skills in Science have to do with scientific investigations and reasoning. Because Readorium is content-based, the following chart shows the alignment of Readorium content to TEKS content requirements in Matter and Energy; Force, Motion and Energy; Earth and Space; and Organisms and Environments.

Readorium Alignment to TEKS Content Standards in Science: Grade 5		
Matter and Energy		
Texas Essential Knowledge and Skills for Science (TEKS): Matter and Energy: Matter has measurable physical properties and those properties determine how matter is classified, changed, and used		
5A. Classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy		
5B. Identify the boiling and freezing/melting points of water on the Celsius scale		
5C. Demonstrate that some mixtures maintain physical properties of their ingredients such as iron filings and sand		
Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by
<ul style="list-style-type: none"> • Food Chemistry • Making Movie Magic • Solving Crimes with Forensics 	<ul style="list-style-type: none"> • A River of Ice (A) • Adventures of Messy Magnet (A) • Fishing for Staples (Magnetic Drama) (A) • How to Make a Cartesian Diver (A) • Magnetic Experiment (A) • Magnificent Magnets (A) • Make Your Own Rock Candy (A) • Making Hovercrafts (A) • Matter Matters! (A) • Rocks Rock! (A) • Science of Jelly Beans (The) (A) • Science of Movie Stunts (The) (A) • Splash (A) • Water Cycle (The) (A) • Wonder Fabrics - Things that Can't get Wet! (A) 	<ul style="list-style-type: none"> • Graphic Features (CL-1, A-1 Global Climate Change)

Readorium Alignment to TEKS Content Standards in Science: Grade Five Continued

Force, Motion and Energy

Texas Essential Knowledge and Skills for Science (TEKS): Force, Motion and Energy: Energy occurs in many forms and can be observed in cycles, patterns, and systems.

6A. Explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy

6B. Demonstrate that the flow of electricity in circuits requires a complete path through which an electric current can pass and can produce light, heat, and sound

6C. Demonstrate that light travels in a straight line until it strikes an object or travels through one medium to another and demonstrate that light can be reflected such as the use of mirrors or other shiny surfaces and refracted such as the appearance of an object when observed through water

6D. Design an experiment that tests the effect of force on an object

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Amusement Park Physics ● Changing Face of Earth (The) ● Computer Revolution (The) ● Deep Space ● Good Vibes- Making Waves with Sounds ● Making Movie Magic ● Olympic Champs: It's Not Just Luck – It's Physics! ● On the Move with Transportation Technology ● Science of Music (The) ● Unbalanced Forces 	<ul style="list-style-type: none"> ● Adventures of Messy Magnet (A) ● Cool Beams! (A) ● Fishing for Staples (A Magnetic Drama) (A) Aurora Borealis: The Glowing Lights (A) ● How to Make a Cartesian Diver(A) ● Look a Rainbow! Where Did that Come From? (A) ● Magnetic Experiment (A) ● Magnificent Magnets (A) ● Make Your Own Rock Candy (A) ● Making Hovercrafts (A) ● Our Own Star, the Sun (A) ● Raise Your Voice (A) ● Spirit and Opportunity on Mars (A) ● Splash (A) ● The Science of Movie Stunts (A) ● The Water Cycle (A) ● Where Did the Planets Come From? (A) 	<ul style="list-style-type: none"> ● Graphic Features (CL-1, A-2 Greenhouse Effect) ● Inferring (CL-1, A-3 Why Is the Sky Blue?) ●Text Organization (CL-1, A-2 How do Satellites Stay in Space?)

Readorium Alignment to TEKS Content Standards in Science: Grade Five Continued

Earth and Space:

Texas Essential Knowledge and Skills for Science (TEKS): **Earth's surface is constantly changing and consists of useful resources**

7A. Explore the processes that led to the formation of sedimentary rocks and fossil fuels

7B. Recognize how landforms such as deltas, canyons, and sand dunes are the result of changes to Earth's surface by wind, water, and ice

7C Identify alternative energy resources such as wind, solar, hydroelectric, geothermal, and biofuels

7D Identify fossils as evidence of past living organisms and the nature of the environments at the time using models

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Changing Face of the Earth (The) ● Deep Space ● Earth's Systems ● Natural Hazards ● Our Planet Earth ● Polluting Our Earth ● Weather Around the World 	<ul style="list-style-type: none"> ● All About Recycling(A) ● Amazing Teen Scientist (A) ● Matter Matters!(A) ● River of Ice (A) ● Rocks Rock! (A) ● Splash (A) ● Too Much Water (A) ● Water Cycle (A) ● Where Did the Planets Come From? (A) ● Earthquakes (V) ● Hawaii Volcanoes (V) ● Tsunami Research (V) ● When Lightning Strikes (V) 	<ul style="list-style-type: none"> ●Word Learning (CL-1, A-1 Introduction to Archeology) ●Word Learning (CL-1, A-2 How Archaeologists Work) ●Word Learning (CL-1, A-3 The Archeology Lab) ● Author's Purpose (CL-1, A-3 Tornado) ● Click or Clunk (CL-1, A-1 Why Save Rainforests?)

Readorium Alignment to TEKS Content Standards in Science: Grade Five Continued

Earth and Space:

Texas Essential Knowledge and Skills for Science (TEKS): Earth and Space: The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system.

- 8A.** Differentiate between weather and climate
- 8B.** Explain how the Sun and the ocean interact in the water cycle
- 8C.** Demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky
- 8D.** Identify and compare the physical characteristics of the Sun, Earth, and Moon.

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Changing the Face of Earth ● Earth's Systems ● Weather Around the World 	<ul style="list-style-type: none"> ● A River of Ice (A) ● A Trip to Mars (A) ● Aurora Borealis: The Glowing Lights (A) ● Biggest Shadow of All, A Solar Eclipse (A) ● Catching a Comet (A) ● Future of the Sun (A) ● Look a Rainbow! Where Did that Come From? (A) ● Our Galactic Neighborhood (A) ● Our Own Star, the Sun (A) ● Spirit and Opportunity on Mars (A) ● Strange Stars (A) ● Surfaces and Eclipses of the Moon (A) ● Treasures in the Sky(A) ● Voyager Space Probes (A) 	<ul style="list-style-type: none"> ● Author's Purpose (CL-1, A-3 Tornado) ● Author's Purpose (CL-1, A-1 Weather Scientist) ● Questioning (CL-2, A-1 Crazy Careers in Science) ● Text Organization (CL-1, A-1 What Is a Satellite?) ● Text Organization (CL-1, A-3 How Satellites Work) ● Text Organization (CL-1, A-2 How do Satellites Stay in Space?) ● Inferring (CL-1, A-2 What is a Planet?)

Readorium Alignment to TEKS Content Standards in Science: Grade Five Continued

Organisms and Environments

Texas Essential Knowledge and Skills for Science (TEKS): Organisms and Environments: There are relationships, systems, and cycles within environments.

9A. Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving elements

9B. Describe how the flow of energy derived from the Sun, used by producers to create their own food, is transferred through a food chain and food web to consumers and decomposers

9C. Predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways

9D. Identify the significance of the carbon dioxide oxygen cycle to the survival of plants and animal

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Birds of a Feather ● Buzzing about Bees and Wasps ● Dependency of Life (The) ● Exploring Ecosystems ● Exploring the Ocean’s Depths ● Inheritance, It's All in the Genes ● Invasive Species ● Natural Hazards ● Our Gross World ● Polluting Our Earth ● Secret Language of Animals (The) 	<ul style="list-style-type: none"> ● Amazing Water Bear (A) ● Animals of Ice (V) ● Arctic Krill (A) ● Batty for Bats (A) ● Bee-bee-havior (A) ● Beluga Whales (A) ● Beneath the Fin (A) ● Breathe Easier - Understanding Asthma (A) ● Carnivorous Dinosaurs (A) ● Cicada Swarm (A) ● Emperor Penguins (A) ● Evolution of the Peppered Moth (A) ● Fireflies if the Ocean (A) ● Herbivorous Dinosaurs (A) ● How Plants Survive (Parts 1 and 2) ● How Spiders Catch Prey (A) ● Interesting and Funny Animal Relationships (A) ● Invasion of the Earthworms (V) ● Leaf Cutter Ants (V) ● Polar Bears (A) ● Raise Your Voice (A) 	<ul style="list-style-type: none"> ● Click or Clunk (CL-1, A-1 Why Save Rainforests?) ● Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys)

	<ul style="list-style-type: none">● Shrimp Farming: A Shocking Environment (A)● Symbiotic Relationship of a Goby and a Shrimp (A)● Social Insects (A)● Tigers and Lions (A)● Twin Fascination (A)● Venus Flytrap (A)● Walruses (A)● Weird Animal Defense Mechanisms (A)● Why Dandelions are Dandy (A)● Animals of Ice (V)● Invasion of the Earthworms (V)● Leaf Cutter Ants (V)● RoboBees (V)	<ul style="list-style-type: none">●
--	---	---

Readorium Alignment to TEKS Content Standards in Science: Grade Five Continued

Organisms and Environments

Texas Essential Knowledge and Skills for Science (TEKS): Organisms and environments: organisms undergo similar life processes and have structures that help them survive within their environments.

10A. Compare the structures and functions of different species that help them live and survive such as hooves on prairie animals or webbed feet in aquatic animals

10B. Differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle\10C.

10C Describe the differences between complete and incomplete metamorphosis of insects.

Readorium Books by Standard	Readorium Magazine Articles (A) & Videos (V) by Standard	Classroom Strategy Lessons (CL) with Articles (A) by Standard
<ul style="list-style-type: none"> ● Beetlemania ● Birds of a Feather ● Buzzing About Bees and Wasps ● Deadliest Creatures ● Deep Sea Creatures ● Dependency of Life (The) ● Exploring Ecosystems ● Exploring the Ocean's Depths ● How We Learn ● Inheritance, It's All in the Genes ● Invasive Species ● Life and Death in the Wild ● Our Gross World ● Our Planet Earth ● Smarter Than You think, Animals that Amaze ● Spider Stories ● Weird and Wonderful World of Plants 	<ul style="list-style-type: none"> ● A Sweet Treat (A) ● Bee-bee-havior (A) ● Beneath the Fin (A) ● Brain: What's in There (The)? (A) ● Breathe Easier - Understanding Asthma (A) ● Cancer Cells Out of Control (A) ● Carnivorous Dinosaurs (A) ● Cicada Swarm (A) ● Excuse Me, But Burping is Natural (A) ● Fireflies of the Ocean (A) ● How Do We Think? (A) ● How Spiders Catch Prey (A) ● Lion in Waiting (A) ● Mysteries of the Common Cold (A) ● Raise Your Voice (A) ● Interesting & Funny Animal Relationships (A) ● Leaf Cutter Ants(V) 	<ul style="list-style-type: none"> ● Click or Clunk (CL-2, A-3 The Venomous Sea Wasp) ● Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys) ● Main Idea/Details (CL-2, A-2 Animals of Panama) ● Main Idea/Details (CL-3, A-1 Camels) ● Main Ideas/Details (CL-4, A-3 Why Hair Turns Grey?) ● Questioning (CL-1, A-1 White-Throated Capuchins) ● Questioning (CL-1, A-2 Agoutis) ● Questioning (CL-1, A-3 Sloths) ● Questioning (CL-2, A-2 Vampires in Nature) ● Questioning (CL-2, A-3 Parasites: Nature's Thieves)

<ul style="list-style-type: none">● Smarter Than You think, Animals that Amaze● Spider Stories● Weird and Wonderful World of Plants	<ul style="list-style-type: none">● Monkey Business (V)● Orangutan Copycats (V)● Venus Flytrap: A Meat Eating Plant (A)● Weird Animal Defense Mechanisms (A)● Why Are Some Hands are Handier (A)● Why Dandelions are Dandy (A)	
---	---	--