

Readorium Alignment with Carolina Biological Supply Company's Building Blocks of Science: Grades 3-5

Readorium Content: In Readorium, students choose **science books** that interest them, or teachers may easily lock or unlock specific books for classes, groups, or individuals. All students can understand the same rich content because the readability levels of the chapters and the supports students receive automatically adjust to their individual needs as they read. Once students receive tokens for completing books, they may select magazine articles or National Science Foundation videos. They may also participate in game-like activities based on the concepts and vocabulary they just learned. Teachers can log into the **Teacher Resource Center** to view student data and download resources and lessons based on this data.

The following chart shows Readorium's alignment to Carolina Biological Supply Company's Building Blocks of Science based on the NGSS. Some Readorium content applies to more than one standard.

Carolina Biological Supply Company: Building Blocks of Science: Grade 3 Forces and Interactions				
Lesson 1 Balanced Forces	Lesson 2 Unbalanced Forces	Lesson 3 Changes in Motion	Lesson 4 Magnetism and Electricity	Lesson 5 Investigation
Vocabulary Lesson 1 Balance, Balanced forces, Equal, Even, Force, Fulcrum, Gram, Gravity, Level, Mass, Scale	Vocabulary Lesson 2 Friction, Gram, Inertia, Isaac Newton, Motion, Newton, Spring scale	Vocabulary Lesson 3 Acceleration, Decrease, Distance, Increase, Load, Speed, Strength	Vocabulary Lesson 4 Attract, Charge, Magnet, Magnetic field, Magnetism, Repel, Static electricity	Vocabulary Lesson 5 See lessons 1-4
<ul style="list-style-type: none"> • NGSS 3-PS2-1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object 				
<ul style="list-style-type: none"> • NGSS 3-PS2-2. Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. 				
<ul style="list-style-type: none"> • NGSS 3-PS2-3. Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other 				
<ul style="list-style-type: none"> • NGSS 3-PS2-4. Define a simple design problem that can be solved by applying scientific ideas about magnets. 				
Readorium Chapter Books <ul style="list-style-type: none"> • Unbalanced Forces • Deep Space • Amusement Park Physics • Changing Face of Earth, The • Olympic Physics! 		Readorium Articles <ul style="list-style-type: none"> • Fishing for Staples: Magnetic Drama • Adventures of Messy Magnet • Magnificent Magnets • A Magnet Experiment • A River of Ice • Making Hovercrafts • Simple Machines: Facts & Riddles 		Readorium Class Lessons
<ul style="list-style-type: none"> • NGSS 3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time or cost. 				
<ul style="list-style-type: none"> • NGSS 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 				
Readorium Chapter Books <ul style="list-style-type: none"> • Computer Revolution • Deep Space • Earth's Systems • Exploring the Ocean's Depths • 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 • Science - What's it All About? • Solving Crime with Forensics • Technology Changes Medicine 		Readorium Articles <ul style="list-style-type: none"> • All About Recycling • Amazing Teen Scientist • Breathe Easier - Asthma • Computer's Best Friend • Cool Beams! • Mysteries of the Common Cold • Science of Jelly Beans (The) • Science of Movie Stunts (The) • Shrimp Farming: A Shocking Tale 		Class Lessons <ul style="list-style-type: none"> • Graphic Features (CL-2, A-1 Siege Engines) • Word Learning (CL-1, A-1 Introduction to Archeology) • Word Learning (CL-1, A-2 How Archeologists Work) • Word Learning (CL-1, A-3 The Archeology Lab)
		Videos <ul style="list-style-type: none"> • Robotic Arms • SpelBots 		

Readorium Alignment with Building Blocks of Science: Grade 3 - continued

Carolina Biological Supply Company: Building Blocks of Science: Grade 3 Life in Ecosystems

Lesson 1 Life in Ecosystems	Lesson 2 Inheritance and Variation of Traits	Lesson 3 Adaptations	Lesson 4 Environmental Influences	Lesson 5 Ecosystems, Humans, and Biodiversity
Vocabulary Lesson 1 Community, Ecosystem, Environment, Germinating, Habitat, Larvae, Life cycle, Organism, Population, Reproduce, Species, Survive	Vocabulary Lesson 2 Acquired trait, Inherited trait, Offspring, Reproduce, Species, Trait, Variation	Vocabulary Lesson 3 Adaptation, Behavioral adaptation, Camouflage, Physical adaptation, Predator, Prey	Vocabulary Lesson 4 Ancestor, Extinct, Geologic Time Scale, Influence, Fossil, Paleontology	Vocabulary Lesson 5 Ecologist, Ecology

- **NGSS 3-LS1-1:** Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death

- **NGSS 3-LS2-1:** Construct an argument that some animals form groups that help members survive.

Readorium Chapter Books	Readorium Articles	Readorium Class Lessons
<ul style="list-style-type: none"> • Beetlemania • Birds of a Feather • Buzzing About Bees and Wasps • Deep Sea Creatures • Exploring the Ocean's Depths • Secret Languages of Animals 	<ul style="list-style-type: none"> • Bee Bee-havior • Tigers and Lions! • Why Dandelions Are Dandy <p align="center">Videos</p> <ul style="list-style-type: none"> • Antarctic Krill • Beluga Whales • Emperor Penguins • Make Way for Ducklings • Monkey Business • Polar Bears • Sea Turtles (<ul style="list-style-type: none"> • Main Idea/Details (CL-1, A-1 Mantled Howler Monkeys) • Questioning (CL-1, A-1 White-Throated Capuchins)

- **NGSS 3-LS3-1:** Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organism

- **NGSS 3-LS3-2:** Use evidence to support the explanation that traits can be influenced by the environment.

Readorium Chapter Books	Readorium Articles	Readorium Class Lessons
<ul style="list-style-type: none"> • Deep Sea Creatures • Invasive Species • Life and Death in the Wild • Our Gross World • Spider Stories • Weird and Wonderful Plants 	<ul style="list-style-type: none"> • Biotechnology • Breathe Easier - Understanding Asthma • Evolution of the Peppered Moth • Hair Time! <p align="center">Videos</p> <ul style="list-style-type: none"> • Monkey Business • Orangutan Copycats 	<ul style="list-style-type: none"> • Main Idea/Details (CL-4, A-3 Why Does Hair Turns Grey?)

- **NGSS 3-LS4-1:** Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago

- **NGSS 3-LS4-2:** Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.

- **NGSS 3-LS4-3:** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

- **NGSS 3-LS4-4:** Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

Readorium Chapter Books	Readorium Articles	Readorium Class Lessons
<ul style="list-style-type: none"> • Beetlemania • Birds of a Feather • Buzzing About Bees and Wasps • Deep Sea Creatures 	<ul style="list-style-type: none"> • Evolution of the Peppered Moth • How Spiders Catch Prey • Living or Non-Living: You Decide • Rocks Rock 	<ul style="list-style-type: none"> • Inferring (CL-2, A-1 Invasive Species) • Main Idea/Details (CL-3, A-1 How Much Water Does a

<ul style="list-style-type: none"> • Dependency of Life, The • Exploring Ecosystems • Invasive Species • Life and Death in the Wild • Our Planet Earth • Powering Our Lives with Energy • Spider Stories • Weird and Wonderful Plants 	<ul style="list-style-type: none"> • Shrimp Farming- Shocking Tale • Weird Animal Defense Mechanisms • Why Are Some Hands More "Handy" Than Others? Videos • Antarctic Krill • Beluga Whales • Emperor Penguins • Make Way for Ducklings • Monkey Business • Orangutan Copycats • Polar Bears • Sea Turtles • Walruses 	<ul style="list-style-type: none"> • Camel's Hump Hold?) • Main Idea/Details (CL-3, A-2 Can You Tell the Temperature by Listening to a Cricket Chirp?) • Main Idea/Details (CL-3, A-3 Why Do Geese Fly in a V-Shape?) • Questioning (CL-1, A-3 Sloths) • Text Organization (CL-2, A-1 Inside Your Body) • Text Organization (CL-2, A-2 Disease Database) • Text Organization (CL-2, A-3 All About Asthma) • Word Learning (CL-2, A-1 What Makes a Bird a Bird?) • Word Learning (CL-2, A-2 What is a Waterfowl?) • Word Learning (CL-2, A-3 Webbed Wonders)
<ul style="list-style-type: none"> • NGGS 3-5-ETS1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 		
<p style="text-align: center;">Readorium Chapter Books</p> <ul style="list-style-type: none"> • 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 	<p style="text-align: center;">Readorium Articles</p> <ul style="list-style-type: none"> • Amazing Teen Scientist • A Computer's Best Friend • Why Are Some Hands More "Handy" Than Others • Mysteries of the Common Cold • Breathe Easier - Understanding Asthma • All About Recycling • Shrimp Farming: A Shocking Environment 	<p style="text-align: center;">Readorium Class Lessons</p> <ul style="list-style-type: none"> • Graphic Features (CL-2, A-1 -Siege Engines)

Readorium Alignment with Building Blocks of Science: Grade 3 - continued

Carolina Biological Supply Company: Building Blocks of Science: Grade 3 Weather and Climate Patterns

Lesson 1 Weather and the Tools to Study Weather	Lesson 2 Analyzing Weather Data and Patterns	Lesson 3 Weather and Climate Connections	Lesson 4 Dangerous Weather	Lesson 5 Possible Solutions to Reduce Impacts of Weather Hazards
Vocabulary Lesson 1 Air pressure, Anemometer, Atmosphere, Barometer, Celsius, Degrees, Fahrenheit, Forecast, Meteorologist, Meteorology, Precipitation, Rain, Rain gauge, Rainfall, Season, Technology, Temperature, Thermometer, Weather, Wind vane, Windsock	Vocabulary Lesson 2 Average, Cloud, Forecast model, Satellite	Vocabulary Lesson 3 Altitude, Biosphere, Climate, Climate zone, Equator, Geosphere, Greenhouse gases, Hydrosphere, Polar, Temperate, Topography, Tropical	Vocabulary Lesson 4 Air mass, Hazard. Tropical storm	Vocabulary Lesson 5 All vocabulary from previous lessons
<ul style="list-style-type: none"> • NGSS 3-ESS2-1: Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. • NGSS 3-ESS2-2: Obtain and combine information to describe climates in different regions of the world 				
Readorium Chapter Books	Readorium Articles	Readorium Class Lessons		
<ul style="list-style-type: none"> • Exploring the Ocean’s Depths • Weather Around the World 	<ul style="list-style-type: none"> • Aurora Borealis: The Glowing Lights • Biggest Shadow of All: A Solar Eclipse • Our Own Star, the Sun • River of Ice • Too Much Water <p align="center">Videos</p> <ul style="list-style-type: none"> • Tsunami Research • When Lightning Strikes 	<ul style="list-style-type: none"> • 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) 		
<ul style="list-style-type: none"> • NGSS 3-3-ESS3-1: Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. 				
Readorium Chapter Books	Readorium Articles	Readorium Class Lessons		
<ul style="list-style-type: none"> • Natural Hazards 	<ul style="list-style-type: none"> • Too Much Water! 			
<ul style="list-style-type: none"> • NGSS 3-5-ETS1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 				
Readorium Chapter Books	Readorium Articles	Readorium Class Lessons		
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Amazing Teen Scientist • A Computer's Best Friend • Why Are Some Hands More "Handy" Than Others? • Mysteries of the Common Cold • Breathe Easier - Understanding Asthma • All About Recycling • Shrimp Farming: A Shocking Environment <p align="center">Videos</p> <ul style="list-style-type: none"> • Tsunami Research 	<ul style="list-style-type: none"> • Graphic Features (CL-2, A-1 -Siege Engines) 		