Course Description: Semester B of third grade science begins with the students diving deeper into habitats, biomes, and seasonal adaptations. The learners continue with types of terrain, inherited characteristics, matter, gravity, and even magnetism. All of these lessons are taught using video, projects, and experimentation. Semester B asks learners to look a bit deeper into things they encounter such as biodiversity and natural resources.

Module	Lesson Title	Objectives
Module 19- Where Animals Live	Observing Habitats	• Observe and describe the homes of various animals.
	Living in a Pond	• Describe a pond habitat. • Construct an argument about the animals that live in a pond.
	Comfortable in a Cave	• Describe a cave habitat. • Construct an argument about the animals that live in a cave.
Module 20- Seasonal Changes	Animals and Seasons	• Describe how animals respond to changing seasons.
	Hibernation	• Explain why animals hibernate.
	Migration	• Explain why animals migrate.
Module 21-	Classifying Biomes 1	• Identify three biomes: desert, rainforest, and tundra. • Describe the animals that live in the three biomes. • Describe the adaptations the animals made to their environments.

Module	Lesson Title	Objectives
Biomes Around the World	Classifying Biomes 2	• Identify additional biomes: grassland, wetlands, and forests. • Describe the animals and adaptations they made in these biomes. • Illustrate and describe characteristics of the local biome.
	Aquatic Biomes	• Draw conclusions about the environment of an aquatic ecosystem.
	Polar Bear Zoo	• Apply knowledge of biomes and habitats to create a home for a polar bear.
Module 22- History of the Earth	Layers of the Earth	• Identify different layers of the Earth. • Describe how the type of organisms living on Earth has changed over time.
	Types of Fossils	• Describe how fossils can provide evidence about the plants and animals that lived long ago and the nature of the environment at that time. • Create a fossil.
	Fossil Detective	• Explain how fossils can be compared to one another and to present-day organisms to find similarities and differences. • Investigate characteristics of fossils. • Analyze the clues fossils provide about environments and organisms.
Module 23- How the Land is Formed	Types of Landforms	• Identify different types of landforms. • Compare and contrast landforms.
	Mountains	• Identify different mountains. • Describe how mountains are formed. • Demonstrate how mountains are formed.

Module	Lesson Title	Objectives
	Landscapes	• Construct a model of various types of landforms.
Module 24- Fast, and Slow Changes on Earth	Volcanoes	• Describe the characteristics and causes of volcanoes. • Illustrate volcanoes.
	Earthquakes	• Describe the characteristics and causes of earthquakes. • Illustrate earthquakes.
	Slow Changes	• Describe slow changes to land on Earth. • Explain how erosion occurs.
	Erosion Prevention	• Explain why plants are important to preventing erosion. • Create a model of a way to prevent erosion.
Module 25- Nature and Nurture	Inherited Traits	• Identify traits that are inherited in animals and plants. • Analyze variations in traits within a species.
	Environmental Traits	• Explain how the environment can impact traits.
	Evidence of Survival	• Investigate variations in traits and how they help animals survive.
Module 26- How Animals Adapt	Eyes, Ears, and Beaks	• Identify characteristics of animals that help them survive. • Investigate different types of beaks and determine what food they are best for eating.

Module	Lesson Title	Objectives
	Camouflage	• Make observations about how animals use camouflage.
	Mimicry	• Identify ways animals use mimicry to survive.
Module 27- Survive, Thrive, or Perish	Invasive Species	• Describe how invasive species impact an environment.
	Deforestation	• Describe how deforestation impacts an environment.
	Water Distribution	• Describe how floods or droughts impact an environment. • Investigate what droughts and floods do to plants and animals.
	Engineer an Environmental Solution	• Design a solution to an environmental change. • Apply the engineering design process to an environmental issue.
Module 28- Properties of Matter	Everything's Matter	• Recognize that everything is made of matter.
	Properties of Matter	• Describe objects based on properties. • Classify objects based on properties.
	Measuring Temperature	• Measure temperature of solids and liquids. • Compare and contrast temperatures of solids and liquids.

Module	Lesson Title	Objectives
Module 29- States of Matter	States of Matter	• Differentiate between the three states of matter.
	Mass of Solids and Liquids	• Measure the mass of matter using a balance. • Compare and contrast mass of matter.
	Volume of Solids and Liquids	• Measure the volume of matter using a graduated cylinder. • Compare and contrast volume of matter.
Module 30- Changes in Matter	Heating and Cooling	• Predict how heating and cooling will change different types of matter. • Make observations about changes in matter.
	Basic Reactions	• Investigate how burning or baking create chemical changes. • Record observations about chemical changes.
	Mixtures and Solutions	• Differentiate between a mixture and a solution. • Investigate different mixtures and solutions.
	Ice Cream	• Create a new ice cream topping by applying what they learned about solutions and mixtures. • Investigate how making ice cream can demonstrate different changes in matter.
Module 31- Contributions to Science	Life Scientists	• Make connections between biology and biologists. • Identify the types of technology used in biological sciences.
	Earth Scientists	• Make connections between geology and geologist. • Identify the types of technology used in geological sciences.

Module	Lesson Title	Objectives
	Physical Scientists	• Make connections between chemistry and chemists. • Identify the types of technology used in chemistry.
Module 32- Balanced Ecosystems	Balanced and Unbalanced Ecosystems	• Observe physical characteristics of environments and how they support populations and communities within an ecosystem. • Describe physical characteristics of environments and how they support populations and communities within an ecosystem.
	Competition and Cooperation	• Describe ways some animals cooperate to survive. • Explain how animals compete to survive. • Draw conclusions about how cooperation and competition are important for balanced ecosystems.
	Threats to Biodiversity	• Identify threats to biodiversity. • Make observations about threats to biodiversity.
Module 33- Forces in Balance	Gravity	• Investigate the concept of gravity. • Make observations about gravity.
	Position and Motion	• Make predictions about motion. • Explain how forces cause changes in motion.
	Balanced and Unbalanced Forces	• Describe balanced and unbalanced forces.
	Egg Drop	• Design an experiment to explore the effects of balanced and unbalanced forces on an object.

Module	Lesson Title	Objectives
Module 34- Magnets	Classifying with Magnets	• Classify objects as magnetic and nonmagnetic. • Draw conclusions about magnetic objects. • Describe the effects of Earth's magnetism.
	Uses of Magnets	• Describe uses for magnets. • Construct a compass. • Investigate how magnets can lift objects.
	Magnetic Cause and Effect	• Investigate how magnetic forces push and pull. • Construct an electromagnet to explore magnetic forces.
Module 35- Resources All Around Us	Natural Resources	• List locally found natural resources. • Describe characteristics of natural resources.
	Uses of Natural Resources	• Make connections between natural resources and products that are made from them.
	Conserving Natural Resources	• Describe ways to conserve resources.
Module 36- Using Resources	Agriculture	• Identify processes in agriculture that require different procedures, products, or systems. • Identify the machines used in agriculture.
	Transportation and Manufacturing	• Describe how transportation systems work. • Explain how manufacturing systems design and produce items at quantity. • List products used in everyday life for needs and wants.
	Communication and Technology	• Identify technologies that support and improve life. • Describe various ways people communicate using technology. • Identify where technology is used. • Critique the merits of technology.

Module	Lesson Title	Objectives
	Magnetic Engineering Solution	• Define a simple design problem that can be solved by applying scientific ideas about magnets. • Apply the engineering design process to design a solution for.