



Experience **Biology**

Elementary

Scope and Sequence

Lesson 1: What is Life?

An overview of the 5 characteristics of living things and how to recognize whether something is alive or not alive

Lesson 2: The Building Blocks of Life

The main parts of cells—the smallest units of life—as well as the differences between eukaryotes and prokaryotes

Lesson 3: The Secret Code of Life

A very basic explanation of DNA—the blueprint for making all of the proteins a cell needs

Lesson 4: Fueled Up!

How organisms need energy to grow and thrive, along with the two most basic categories of organisms: heterotrophs and autotrophs

Lesson 5: What's in a Name?

How scientists classify and name living things

Lesson 6: Biomes Everywhere!

A peek into the ecological biomes in which organisms live: tundra, coniferous forests, deciduous forests, grasslands, and tropical rainforests

Lesson 7: Itsy Bitsy Teeny Tiny Creatures

An overview of the two prokaryotic kingdoms—Archaea and Bacteria—and the differences between them

Lesson 8: The Junk Drawer Kingdom

A brief look at microscopic life forms like protozoans, algae, and molds, as well as the characteristics they have in common as members of Kingdom Protista

Lesson 9: The Fungus Among Us

The characteristics of organisms in Kingdom Fungi and how they get their energy

Lesson 10: What is a Plant?

An overview of what all plants have in common: the structures within their cells, common organs, and their source of energy

Lesson 11: The Wide World of Plants

A summary of the 4 main types of plants—mosses, ferns, gymnosperms, and angiosperms—and what makes them different

Lesson 12: Mean, Green, Energy-Making Machines

The structure of leaves and how photosynthesis works in plants—that is, how plants make their own energy

Lesson 13: Roots & Shoots

The structure of stems and roots and the vascular tissue inside that moves water and nutrients through the plant

Lesson 14: The Reason for Flowers

The structure of flowers in angiosperms and how pollination takes place

Lesson 15: It Begins with a Seed

The structure and growth of fruit in angiosperms and how seeds are dispersed and germinate into new plants

Lesson 16: Amazing Animals

A look at the common traits of all animals as well as the 9 major phyla of animals we see in the world

Lesson 17: Silly Sponges

A quick look at the simplest of animals—the sea sponges—and what makes these creatures unique among all other animals, and exploring symmetry in animals

Lesson 18: Wiggly Worms

An overview of the three main phyla of worms, where they are found, what makes them distinct from one another, and what a parasite is

Lesson 19: Majestic Medusas and Patient Polyps

A brief look at the fascinating world of Cnidarians, including jellyfish, sea anemone, coral, and hydra, and the difference between a complete and incomplete digestive system

Lesson 20: Spiny Skinned Savages

The structure and habits of Echinoderms, including starfish, sea cucumber, sea urchins, sand dollars, and basket stars, and comparing the differences between an open and closed circulatory system

Lesson 21: Meddlesome Mollusks

A look at the common traits and body characteristics found in animals in the class of Mollusks such as clams, oysters, snails, octopuses, and squid

Lesson 22: Armored Arthropods and the Crabby Crustaceans

The common physical traits and body structures found among the phyla of animals called Arthropods and a closer look at animals in the class of Crustaceans

Lesson 23: Intrepid Insects & Spindly Spiders

An overview and look at the main body parts of the largest class of animals in the world—the insects—and different types of metamorphosis, including a peek into the world of the 8-legged arthropods, the Arachnids

Lesson 24: The Vast World of Vertebrates

An introduction to the world of vertebrates and their unique characteristics

Lesson 25: Funky Fish

An overview of the three common classes of fish: the jawless fish, cartilaginous fish, and bony fish

Lesson 26: Amazing Amphibians

A look at some of the common structures and unique qualities of amphibians along with a discussion of ectothermic and endothermic animals

Lesson 27: Resplendent Reptiles

An overview of the common traits and habits of reptiles along with a look at a curious habit called hibernation

Lesson 28: Blissful Birds

A summary of the traits seen among the class called Aves—otherwise known as the birds—and their strange custom of hibernation

Lesson 29: Marvelous Mammals

A broad overview of the traits all species of Mammals have in common

Lesson 30: Mini Mammals

A look at how the three categories of mammals begin their life in the womb