

Available in Spanish

Scope and Sequence

Unit 1: Living Systems

LS1-2, LS1-3, ETS1-2, ETS1-3

Lesson 1: Life in the Earth System

Lesson 2: Organisms: Cells to Body Systems

Lesson 3: Mechanisms of Homeostasis

Lesson 4: Bioengineering

Thing Explainer: Bags of Stuff Inside You

Unit 2: Chemistry in Living Systems

LS1-6

Lesson 1: Chemical Bonds and Reactions

Lesson 2: Carbon-Based Molecules

Unit 3: Matter and Energy in Living Systems

LS1-5, LS1-7, LS2-3, LS2-4, LS2-5, ETS1-1, ETS1-3

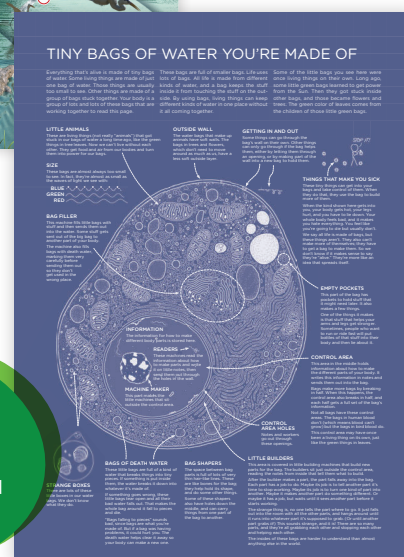
Lesson 1: Photosynthesis

Lesson 2: Cellular Respiration

Lesson 3: Modeling Matter and Energy in Ecosystems

Lesson 4: Cycling of Matter and Energy in Ecosystems

Thing Explainer: Tree



Thing Explainer

Illustrations from
xkcd.com author

Randall Munroe featured
in the textbook!

Unit 4: Ecosystems: Stability and Change

LS2-1, LS2-2, LS2-6

Lesson 1: Population Dynamics

Lesson 2: Ecosystem Dynamics

Thing Explainer: How Forests Come Back

Unit 5: Cells: Stability and Change

LS1-4

Lesson 1: The Cell Cycle

Lesson 2: Mitosis and Differentiation

Thing Explainer: Tiny Bags of Water

Unit 6: Structure and Function of DNA

LS1-1

Lesson 1: DNA Structure and Replication

Lesson 2: Protein Synthesis

Lesson 3: Gene Expression and Regulation

Unit 7: Genetics and Heredity

LS3-1, LS3-2, LS3-3, ETS1-3

Lesson 1: Meiosis

Lesson 2: Mendel and Heredity

Lesson 3: Traits and Probability

Lesson 4: Mutations and Genetic Diversity

Lesson 5: Genetic Engineering

Thing Explainer: Books Inside Us

Unit 8: Evidence for Evolution

LS4-1, LS4-2

Lesson 1: Lines of Evidence for Evolution

Lesson 2: Theory of Natural Selection

Unit 9: Patterns of Evolution

LS2-8, LS3-3, LS4-3, LS4-4, LS4-5

Lesson 1: Evolution of Populations

Lesson 2: Changes in Species

Lesson 3: Adaptive Value of Behavior

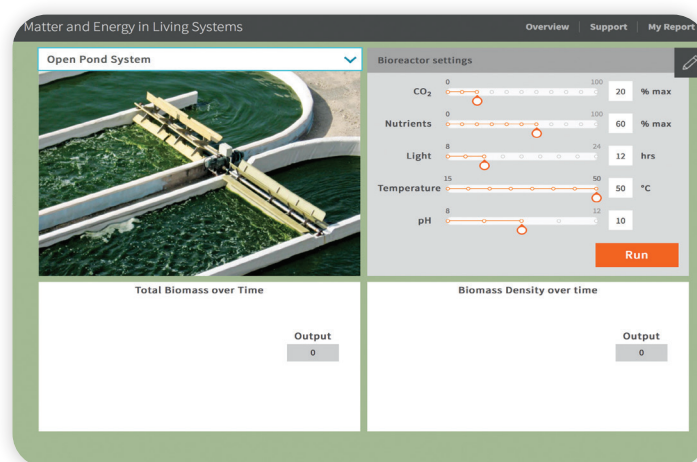
Unit 10: Human Impacts on the Environment

LS2-2, LS2-7, LS4-6, ETS1-1, ETS1-4

Lesson 1: Human Population Growth and the Environment

Lesson 2: Human Impacts on Biodiversity

Lesson 3: Engineering Solutions to Environmental Impacts



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