

Focused Courses are aligned to high school graduation requirements in math, English, science, social studies, and health. These courses are based on Core Courses but have a reduced scope—including having all teacher-scored activities removed—to focus students' time on direct instruction and computer-scored assessment.

UNIT 1: INTRODUCTION TO BIOLOGY

LESSON 1: BIOLOGICAL SCIENCE

Study: What Is Science?

Learn about the nature of science.

Duration: 1 hr Scoring: 0 points

Quiz: What Is Science?

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Biology, Technology, and Society

Learn how science, technology, and society affect one another.

Duration: 1 hr Scoring: 0 points

Quiz: Biology, Technology, and Society

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Biology Basics

Learn about the main characteristics of life.

Duration: 1 hr Scoring: 0 points

Quiz: Biology Basics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 2: TOOLS OF INQUIRY

Study: Scientific Investigations

Learn how to design a scientific investigation.

Duration: 1 hr Scoring: 0 points

Quiz: Scientific Investigations

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Modeling

Learn about different types of scientific models.

Duration: 1 hr Scoring: 0 points

Quiz: Modeling

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Data Analysis

Learn how to use common data analysis techniques.

Duration: 1 hr Scoring: 0 points

Quiz: Data Analysis

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Patterns in Data

Answer open-response questions to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 25 points

LESSON 3: INTRODUCTION TO BIOLOGY WRAP-UP**Review: Introduction to Biology**

Review what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Introduction to Biology

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

Test (TS): Introduction to Biology

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

UNIT 2: ENERGY AND MATTER IN LIVING SYSTEMS**LESSON 1: THE BUILDING BLOCKS OF LIFE****Study: From Atoms to Biosphere**

Learn about the hierarchical organization of biological systems.

Duration: 1 hr Scoring: 0 points

Quiz: From Atoms to Biosphere

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Biomolecules

Learn about the four main types of biomolecules.

Duration: 1 hr Scoring: 0 points

Quiz: Biomolecules

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Energy and Matter in the Biosphere

Learn how energy flows and matter cycles through living systems.

Duration: 1 hr Scoring: 0 points

Quiz: Energy and Matter in the Biosphere

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Modeling the Carbon Cycle

Use a simulation to model the carbon cycle.

Duration: 3 hrs Scoring: 50 points

LESSON 2: PHOTOSYNTHESIS AND CELLULAR RESPIRATION**Study: Photosynthesis**

Learn how autotrophs use photosynthesis to make food.

Duration: 1 hr Scoring: 0 points

Quiz: Photosynthesis

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Cellular Respiration

Learn how cells use cellular respiration to meet their energy needs.

Duration: 1 hr Scoring: 0 points

Quiz: Cellular Respiration

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Modeling Photosynthesis and Cellular Respiration

Use models to investigate photosynthesis and cellular respiration.

Duration: 3 hrs Scoring: 50 points

LESSON 3: INVESTIGATING ENERGY AND MATTER IN LIVING SYSTEMS

Lab: Investigating the Flow of Energy and Cycling of Matter

Investigate how energy flows and matter cycles through living systems.

Duration: 3 hrs Scoring: 50 points

Discuss: Investigating the Flow of Energy and Cycling of Matter

Discuss your lab results.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 4: ENERGY AND MATTER IN LIVING SYSTEMS WRAP-UP

Review: Energy and Matter in Living Systems

Review what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Energy and Matter in Living Systems

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

Test (TS): Energy and Matter in Living Systems

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

UNIT 3: ECOSYSTEMS

LESSON 1: RELATIONSHIPS IN ECOSYSTEMS

Study: Food Chains and Energy Pyramids

Learn how energy and matter enter, move through, and exit ecosystems.

Duration: 1 hr Scoring: 0 points

Quiz: Food Chains and Energy Pyramids

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Changes in Populations

Learn how changes in biotic and abiotic factors can increase or decrease the size of a population.

Duration: 1 hr Scoring: 0 points

Quiz: Changes in Populations

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Relationships in Ecosystems

Answer open-response questions to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 25 points

LESSON 2: ECOSYSTEM STABILITY AND CHANGE

Study: Ecological Succession

Learn how ecosystems recover from disturbances and change over time.

Duration: 1 hr Scoring: 0 points

Quiz: Ecological Succession

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Explore: Changes in Ecosystems

Research how changing environmental conditions can result in a new ecosystem.

Duration: 1 hr 30 mins Scoring: 35 points

Study: Impact of Humans on Ecosystems

Learn how human activities can impact ecosystems.

Duration: 1 hr Scoring: 0 points

Quiz: Impact of Humans on Ecosystems

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Engineering a Solution to Reduce Human Impact

Identify one way human activities have impacted an ecosystem, and design a solution to mitigate the impact.

Duration: 3 hrs Scoring: 50 points

LESSON 3: ECOSYSTEMS WRAP-UP**Review: Ecosystems**

Review what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Ecosystems

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

Test (TS): Ecosystems

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

UNIT 4: MULTICELLULAR ORGANISMS**LESSON 1: GROWTH AND DEVELOPMENT****Study: Mitotic Cell Division**

Learn how eukaryotic cells reproduce.

Duration: 1 hr Scoring: 0 points

Quiz: Mitotic Cell Division

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Cell Differentiation

Learn how eukaryotic cells differentiate in order to become specialized.

Duration: 1 hr Scoring: 0 points

Quiz: Cell Differentiation

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Modeling Cell Division and Differentiation

Use models to investigate cell division and differentiation.

Duration: 3 hrs Scoring: 50 points

LESSON 2: TISSUES, ORGANS, AND BODY SYSTEMS

Study: Tissues and Organs

Learn how cells in most multicellular organisms are organized into tissues and organs.

Duration: 1 hr Scoring: 0 points

Quiz: Tissues and Organs

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Animal Systems

Learn about common animal organ systems and how they interact with one another.

Duration: 1 hr Scoring: 0 points

Quiz: Animal Systems

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Plant Systems

Learn about common plant organ systems and how they interact with one another.

Duration: 1 hr Scoring: 0 points

Quiz: Plant Systems

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Modeling Organ System Interactions

Use models to investigate organ system interactions.

Duration: 3 hrs Scoring: 50 points

LESSON 3: HOMEOSTASIS

Study: Homeostasis

Learn how multicellular organisms maintain homeostasis.

Duration: 1 hr Scoring: 0 points

Quiz: Homeostasis

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Investigating Homeostasis

Plan and conduct an investigation to discover how an organism maintains homeostasis.

Duration: 3 hrs Scoring: 50 points

Discuss: Investigating Homeostasis

Discuss your lab results.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 4: MULTICELLULAR ORGANISMS WRAP-UP

Review: Multicellular Organisms

Review what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Multicellular Organisms

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

Test (TS): Multicellular Organisms

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 30 mins Scoring: 50 points

UNIT 5: SEMESTER 1 REVIEW AND EXAM

LESSON 1: SEMESTER 1 REVIEW AND EXAM

Review: Semester 1 Review

Review what you have learned in this semester.

Duration: 0 hrs 30 mins Scoring: 0 points

Exam: Semester 1 Computer-Scored Exam

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in this semester.

Duration: 0 hrs 40 mins Scoring: 100 points

Final Exam: Semester 1 Teacher-Scored Exam

Take a teacher-scored exam to demonstrate your mastery of concepts and skills covered in this semester.

Duration: 0 hrs 40 mins Scoring: 100 points