Biology focuses on the mastery of basic biological concepts and models while building scientific inquiry skills and exploring the connections between living things and their environment.

The course begins with an introduction to the nature of science and biology, including the major themes of structure and function, matter and energy flow, systems, and the interconnectedness of life. Students then apply those themes to the structure and function of the cell, cellular metabolism, and biogeochemical cycles. Building on this foundation, students explore the connections and interactions between living things by studying genetics, ecosystems and natural selection, and evolution. The course ends with an applied look at human biology.

Scientific inquiry skills are embedded in the direct instruction, wherein students learn to ask scientific questions, form and test hypotheses, and use logic and evidence to draw conclusions about the concepts.

Lab activities reinforce critical thinking, writing, and communication skills and help students develop a deeper understanding of the nature of science.

This course is built to state standards and informed by the National Science Education Standards (NSES).

Length: Two semesters

UNIT 1: INTRODUCTION TO BIOLOGY

LESSON 1: BIOLOGY AS SCIENCE

Study: The Nature of Science

Learn about what a scientist does, and what is and is not science.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Nature of Science

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: The Scientific Process

Learn about the scientific process and the scientific method.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Scientific Process

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: What Is a Biologist

Reflect on what it means to be a biologist and what type of questions biologists answer.

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: CONNECTIONS IN BIOLOGY

Study: Themes in Biology

Learn about the themes that connect all of biology.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Themes in Biology

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Science, Society, and Technology

Learn about the connection between science and society.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Science, Society, and Technology

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Themes in Biology

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 3: DOING SCIENCE: INTRODUCTION TO BIOLOGY

Study: Making a Rip-O-Meter

Learn about the process of scientific inquiry.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Making a Rip-O-Meter

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Making a Rip-O-Meter

Use the scientific method to perform a lab experiment

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Making a Rip-O-Meter

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 4: INTRODUCTION TO BIOLOGY WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 5: DIAGNOSTIC

Diagnostic: Introduction to Biology

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 2: THE CHEMISTRY OF BIOLOGY

LESSON 1: CHEMISTRY OF LIFE

Study: Common Elements in Living Things

Learn about the structure of an atom, and the six main elements living things are made from.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Common Elements in Living Things

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Chemical Reactions and Bonding

Learn about covalent and ionic bonds. Learn the principles of the chemical reactions that occur in living things.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Chemical Reactions and Bonding

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Chemistry in Biology

Reflect on the role of chemistry in the study of biology

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: CARBOHYDRATES, LIPIDS, AND NUCLEIC ACIDS

Study: Carbohydrates

Learn about the structure and function of carbohydrate molecules.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Carbohydrates

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Nucleic Acids and Lipids

Learn about the structure and function of DNA, RNA, and lipids.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Nucleic Acids and Lipids

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: PROTEINS, ENZYMES, AND WATER

Study: Proteins and Enzymes

Learn about the structure and function of protein molecules and enzymes

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Proteins and Enzymes

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Water

Learn about the importance of water in living organisms, including the processes of hydrolysis, dehydration, and osmosis.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Water

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Proteins, Enzymes and Water

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: THE CHEMISTRY OF BIOLOGY

Study: Way to Go, Indigo

Learn about the different types of science and how scientific experiments are designed.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Way to Go, Indigo

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Way to Go, Indigo

Perform a lab to observe the effects of enzymes

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Way to Go, Indigo

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: THE CHEMISTRY OF BIOLOGY WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: The Chemistry of Biology

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 3: CELLS

LESSON 1: CELL STRUCTURE

Study: General Structure of the Cell

Learn about the basic structure and function of cells.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: General Structure of the Cell

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Detailed Structure of the Cell

Learn about the functions of cellular organelles.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Detailed Structure of the Cell

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Chloroplasts

Reflect on the structure and function of chloroplasts in plant cells

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: CELL MEMBRANE

Study: Cell Membrane Structure

Learn about the structure of the cell membrane.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Cell Membrane Structure

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Cellular Transport

Learn about the different ways that substances move in and out of cells

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Cellular Transport

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: CELL DIFFERENTIATION

Study: Specialized Cells and Tissues

Learn about how specialized cells in plants and animals perform many different functions

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Specialized Cells and Tissues

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Cell Differentiation and Stem Cells

Learn about how cells in the body differentiate from stem cells and the controversies surrounding the use of stem cells in research.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Cell Differentiation and Stem Cells

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Cell Differentiation

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: CELLS

Study: Design a Cell

Learn about the size of cells and how they can be observed

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Design a Cell

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Design a Cell

Perform a lab to observe how cell shape affects diffusion

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Design a Cell

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: CELLS WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: Cells

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 4: ENERGY TRANSFER

LESSON 1: PHOTOSYNTHESIS

Study: Photosynthesis Introduction

Learn about the main principles of photosynthesis.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Photosynthesis Introduction

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Process of Photosynthesis

Learn about the chemical reactions of photosynthesis.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Process of Photosynthesis

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Your Sources of Oxygen

Reflect on different global sources of oxygen

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: CELLULAR RESPIRATION

Study: Respiration Introduction

Learn about how living things use respiration to get cellular energy

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Respiration Introduction

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Process of Respiration

Learn about the chemical reactions of respiration and compare the reactions of respiration and photosynthesis.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Process of Respiration

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: MATTER AND ENERGY

Study: Relationships in an Ecosystem

Learn about the types of relationships between organisms in an ecosystem.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Relationships in an Ecosystem

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Energy in the Food Web

Learn about how energy flows through ecosystems in complex food webs

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Energy in the Food Web

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Matter and Energy

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: ENERGY TRANSFER

Study: A Twist on Fermentation

Learn about writing predictions, reading graphs and analyzing variables in lab experiments.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: A Twist on Fermentation

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: A Twist on Fermentation

Perform a lab to observe how sugar availability affects fermentation

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: A Twist on Fermentation

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: ENERGY TRANSFER WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: Energy Transfer

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 5: EARTH'S RESOURCES

LESSON 1: BIOGEOCHEMICAL CYCLES

Study: Water and Oxygen Cycles

Learn about the cycles of water and oxygen in the atmosphere and the importance of these to the preservation of life.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Water and Oxygen Cycles

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Carbon and Nitrogen Cycles

Learn about how carbon and nitrogen cycle through living things and the earth

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Carbon and Nitrogen Cycles

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Your Contribution

Reflect on how using coal for energy impacts the carbon cycle

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: A CHANGING EARTH

Study: Climate Change

Learn about the growing problem of climate change.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Climate Change

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Human Population

Learn about how the growing human population is impacting the earth

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Human Population

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: SOLUTIONS FOR THE FUTURE

Study: Sustaining Resources

Learn about how science can impact the use of resources and waste management

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Sustaining Resources

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Alternative Energy

Learn about the different types of alternative energy

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Alternative Energy

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Solutions for the Future

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: EARTH'S RESOURCES

Study: Can Lake Life Remain Despite Acid Rain?

Learn about pH acids and bases

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Can Lake Life Remain Despite Acid Rain?

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Can Lake Life Remain Despite Acid Rain?

Perform a lab to observe the impacts of acid rain on the environment

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Can Lake Life Remain Despite Acid Rain?

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: EARTH'S RESOURCES WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: Earth's Resources

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 6: BIOLOGY SEMESTER 1 REVIEW AND EXAM

LESSON 1: BIOLOGY SEMESTER 1

Review: Biology Semester 1

Prepare for the semester exam by reviewing key concepts covered in this semester.

Duration: 1 hr Scoring: 0 points

Exam: Biology Semester 1

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

Duration: 1 hr Scoring: 100 points

Final Exam: Biology Semester 1

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

Duration: 1 hr Scoring: 100 points

UNIT 7: DNA AND HEREDITY

LESSON 1: THE CODE OF LIFE

Study: Organization of DNA

Learn about the organization of DNA into alleles, genes, and chromosomes.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Organization of DNA

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Mitosis

Learn about the process of mitosis.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Mitosis

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Your Traits

Reflect on the uniqueness of human traits.

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: PASSING ON TRAITS

Study: Meiosis

Learn about the process of meiosis.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Meiosis

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Principles of Heredity

Learn about the principles of heredity and the importance of genetics to organisms.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Principles of Heredity

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: MENDELIAN GENETICS

Study: Basics of Mendelian Genetics

Learn about the history and principles of Mendelian genetics.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Basics of Mendelian Genetics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Predicting Genetic Outcomes

Learn how to predict genetic outcomes. Learn how to use Punnett squares.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Predicting Genetic Outcomes

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: DNA and Heredity

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: DNA AND HEREDITY

Study: The Right Prescription for Bacteria

Learn about bacteria.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Right Prescription for Bacteria

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: The Right Prescription for Bacteria

Perform a lab about the effect of antibiotics on bacteria

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: The Right Prescription for Bacteria

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: DNA AND HEREDITY WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: DNA and Heredity

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 8: DNA TO PROTEIN

LESSON 1: STRUCTURE OF GENETIC MATERIAL

Study: DNA Replication

Learn about the structure of DNA. Learn about the process of DNA replication.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: DNA Replication

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Viruses and Bacteria

Learn about the structure of viruses and bacteria, how they obtain food and reproduce, and their significance to ecosystems.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Viruses and Bacteria

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Nucleic Acids

Reflect on how many scientists contributed to the discovery of the structure of DNA

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: FROM DNA TO PROTEIN

Study: Transcription

Learn about how DNA is read to make mRNA in the process of transcription

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Transcription

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Translation

Learn about mRNA is used to build molecules of protein

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Translation

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: CHANGES TO DNA

Study: Genetic Mutations

Learn how genetic mutations occur, the effect of mutations, and different types of mutations.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Genetic Mutations

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: DNA Technology

Learn about technologies related to DNA, their significance, and the ethical and societal issues related to them.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: DNA Technology

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: DNA to Protein

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: DNA TO PROTEIN

Study: Radical Radishes

Learn about methods to study DNA.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Radical Radishes

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Radical Radishes

Perform a lab to test how radiation affects the germination of radish seedlings.

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Radical Radishes

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: DNA TO PROTEIN WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: DNA to Protein

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 9: ECOSYSTEMS AND NATURAL SELECTION

LESSON 1: ECOSYSTEMS

Study: Ecosystems and Biomes

Learn about what makes up an ecosystem and about different types of ecosystems.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Ecosystems and Biomes

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Stability and Change in an Ecosystem

Learn how an ecosystem responds to change.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Stability and Change in an Ecosystem

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Your Ecosystem

Reflect on the qualities of the ecosystem you live in

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: POPULATIONS

Study: Population Structure

Learn about factors that affect populations.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Population Structure

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Population Dynamics

Learn about how genes are passed through populations.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Population Dynamics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: ADAPTATION AND NATURAL SELECTION

Study: Variation and Adaptation

Learn how species vary geographically and over time and how they adapt to their habitats.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Variation and Adaptation

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Natural Selection

Learn how and why natural selection occurs, what affects natural selection, and what is and is not natural selection.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Natural Selection

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Adaptation and Natural Selection

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: ECOSYSTEMS AND NATURAL SELECTION

Study: Birds on an Island

Learn about using simulations models and other experimental techniques

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Birds on an Island

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Birds on an Island

Perform a lab to observe how the frequency of traits in a population changes over time

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Birds on an Island

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: ECOSYSTEMS AND NATURAL SELECTION WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: Ecosystems and Natural Selection

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 10: EVOLUTION AND CLASSIFICATION

LESSON 1: EVOLUTION

Study: Mechanism for Evolution

Learn about the process of evolution and the history of the theory of evolution.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Mechanism for Evolution

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Evidence for Evolution

Learn about the fossil record and the implications for evolutionary thought.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Evidence for Evolution

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Theories and Laws

Reflect on the different of theories, hypotheses and laws

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: CLASSIFICATION

Study: Speciation

Learn what defines a living thing.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Speciation

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Methods for Classification

Learn about the taxonomic systems for classifying organisms.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Methods for Classification

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: DIVERSITY OF LIFE

Study: Life on Earth

Learn about microorganisms and fungi.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Life on Earth

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Plants and Animals

Learn about plant and animal structure and function.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Plants and Animals

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Diversity of Life

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: EVOLUTION AND CLASSIFICATION

Study: Bones, Feathers, and Fur

Learn about the scientific process of classifying living things.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Bones, Feathers, and Fur

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Bones, Feathers, and Fur

Perform a lab to observe some characteristics of two classes of vertebrates.

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Bones, Feathers, and Fur

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: EVOLUTION AND CLASSIFICATION WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: Evolution and Classification

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 11: HUMAN BIOLOGY

LESSON 1: STRUCTURE OF THE BODY

Study: The Nervous System

Learn about tissues and the muscular and skeletal systems.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Nervous System

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Respiration and Circulation

Learn about respiration and circulation.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Respiration and Circulation

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Bones and Muscles

Learn about bones and muscles.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Bones and Muscles

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Journal: Diet and Your Body

Reflect on how understanding biology helps you care for your body

Duration: 0 hrs 40 mins Scoring: 20 points

LESSON 2: FUEL, DEFENSE, AND SIGNALING

Study: Digestive and Excretory Systems

Learn about the digestive and excretory systems.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Digestive and Excretory Systems

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: The Immune System

Learn about the immune system.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Immune System

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: The Endocrine System

Learn about the endocrine system.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Endocrine System

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

LESSON 3: REPRODUCTION AND DEVELOPMENT

Study: Males and Females

Learn about males and females.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Males and Females

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Study: Fertilization and Development

Learn about fertilization and development.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Fertilization and Development

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Practice: Reproduction and Development

Practice problem-solving skills related to concepts in the lesson.

Duration: 1 hr Scoring: 25 points

LESSON 4: DOING SCIENCE: HUMAN BIOLOGY

Study: Breaking Down Fat

Learn about how the human body metabolizes lipids.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Breaking Down Fat

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 20 points

Lab: Breaking Down Fat

Perform a lab to explore the breakdown of fat during digestion

Duration: 1 hr 30 mins Scoring: 50 points

Discuss: Breaking Down Fat

Discuss the results of your lab.

Duration: 0 hrs 20 mins Scoring: 15 points

LESSON 5: HUMAN BIOLOGY WRAP-UP

Review: Unit Review

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Computer-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

Test (TS): Teacher-Scored Unit Test

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

Duration: 1 hr Scoring: 50 points

LESSON 6: DIAGNOSTIC

Diagnostic: Human Biology

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 1 hr Scoring: 25 points

UNIT 12: BIOLOGY SEMESTER 2 REVIEW AND EXAM

LESSON 1: BIOLOGY SEMESTER 2

Review: Biology Semester 2

Prepare for the semester exam by reviewing key concepts covered in this semester.

Duration: 1 hr Scoring: 0 points

Exam: Biology Semester 2

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

Duration: 1 hr Scoring: 100 points

Final Exam: Biology Semester 2

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

Duration: 1 hr Scoring: 100 points