

Physical Science offers a focused curriculum designed around the understanding of critical physical science concepts, including the nature and structure of matter, the characteristics of energy, and the mastery of critical scientific skills.

Course topics include an introduction to kinematics, including gravity and two-dimensional motion; force; momentum; waves; electricity; atoms; the periodic table of elements; molecular bonding; chemical reactivity; gases; and an introduction to nuclear energy. Teacher-scored labs encourage students to apply the scientific method.

This course is built to state standards and informed by the National Science Teachers Association (NSTA).

Length: Two semesters

## UNIT 1: LET'S GET PHYSICAL!

### LESSON 1: SCIENCE AS INQUIRY

#### Study: Summarizing

Examine the inquiry the steps in the inquiry process

Duration: 1 hr 15 mins

#### Discuss: Searching for Truth

Discuss the subject of inquiry with your classmates.

Duration: 0 hrs 30 mins Scoring: 20 points

#### Quiz: Science as Inquiry

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### LESSON 2: THE SCIENTIFIC METHOD

#### Study: Representing Data Graphically

Learn how to represent data graphically.

Duration: 1 hr 15 mins

#### Journal: Reflections on the Method

Compose a response to a question about the Scientific Method and submit it to your teacher.

Duration: 0 hrs 30 mins Scoring: 20 points

#### Lab: Wet Pennies

Complete a lab on the Scientific Method using wet pennies.

Duration: 1 hr 30 mins Scoring: 40 points

#### Quiz: The Scientific Method

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### LESSON 3: LET'S GET PHYSICAL! WRAP-UP

#### Review: Let's Get Physical!

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

Duration: 0 hrs 50 mins

### **Practice: Introduction to Physical Science**

Complete a set of practice problems.

Duration: 1 hr Scoring: 50 points

### **Test (CS): Let's Get Physical!**

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

Duration: 0 hrs 40 mins Scoring: 50 points

### **Test (TS): Let's Get Physical!**

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

Duration: 0 hrs 40 mins Scoring: 50 points

## **LESSON 4: DIAGNOSTIC**

### **Diagnostic: Let's Get Physical!**

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

Duration: 1 hr Scoring: 25 points

## **UNIT 2: GET YOUR MOTOR RUNNING**

### **LESSON 1: INTRODUCTION TO KINEMATICS**

#### **Study: Graphing Motion**

Explore kinematics, the study of motion, and begin learning how to create graphs around movement.

Duration: 1 hr 15 mins

#### **Discuss: Defining Distance and Displacement**

Discuss distance and displacement.

Duration: 0 hrs 30 mins Scoring: 20 points

#### **Quiz: Introduction to Kinematics**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 2: GRAVITY AND FREE FALL**

#### **Study: Catch Me — I'm Falling**

Learn how gravitational acceleration affects motion in free fall.

Duration: 1 hr 15 mins

#### **Lab: Falling Bodies**

Complete a lab on falling bodies.

Duration: 1 hr 30 mins Scoring: 40 points

#### **Quiz: Gravity and Free Fall**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 3: MOTION IN TWO DIMENSIONS**

#### **Study: Vectors**

Introduction to vectors and magnitude.

Duration: 1 hr 15 mins

#### **Discuss: Athletic Projectiles**

Discuss two-dimensional motion.

Duration: 0 hrs 30 mins Scoring: 20 points

#### **Quiz: Motion in Two Dimensions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

#### LESSON 4: GET YOUR MOTOR RUNNING WRAP-UP

##### Review: Get Your Motor Running

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

Duration: 0 hrs 50 mins

##### Practice: Motion

Complete a set of practice problems on motion and submit the assignment to your teacher.

Duration: 1 hr Scoring: 50 points

##### Test (CS): Get Your Motor Running

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

Duration: 1 hr Scoring: 50 points

##### Test (TS): Get Your Motor Running

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

Duration: 1 hr Scoring: 50 points

#### LESSON 5: DIAGNOSTIC

##### Diagnostic: Get Your Motor Running

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

Duration: 1 hr Scoring: 25 points

### UNIT 3: MAY THE NET FORCE BE WITH YOU

#### LESSON 1: NEWTON'S LAWS OF MOTION

##### Study: Newton's First Law of Motion

Welcome to the world of dynamics, force, and Newton's First Law

Duration: 1 hr

##### Lab: Newton's Laws

Complete a lab on Newton's laws of motion.

Duration: 1 hr 30 mins Scoring: 40 points

##### Quiz: Newton's Laws of Motion

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

#### LESSON 2: FRICTION

##### Study: Therein Lies the Rub

Learn what causes friction its various types and what effects friction has on motion.

Duration: 1 hr 15 mins

##### Lab: That Rubs Me the Wrong Way

Complete a lab on friction.

Duration: 1 hr 30 mins Scoring: 40 points

##### Quiz: Friction

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

#### LESSON 3: CENTRIPETAL FORCE

##### Study: Motion in a Circle

Learn what causes circular motion and how gravity acts on all objects in the universe.

Duration: 1 hr 15 mins

### **Discuss: My World Is Spinning**

Discuss centripetal force.

Duration: 0 hrs 30 mins Scoring: 20 points

### **Quiz: Centripetal Force**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 4: BUOYANT FORCE**

### **Study: Buoyant Force and Archimedes' Principle**

Why does something sink or swim? Learn by studying buoyant force and Archimedes' Principle

Duration: 1 hr 15 mins

### **Journal: What Floats Your Boat?**

Compose a journal entry in response to a question on buoyancy and submit it to your teacher.

Duration: 0 hrs 30 mins Scoring: 20 points

### **Quiz: Buoyancy**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 5: MAY THE NET FORCE BE WITH YOU WRAP-UP**

### **Review: May the Net Force Be with You**

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

Duration: 0 hrs 50 mins

### **Practice: Forces**

Complete a set of practice problems on forces and submit the assignment to your teacher.

Duration: 1 hr Scoring: 50 points

### **Test (CS): May the Net Force Be with You**

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

Duration: 1 hr Scoring: 50 points

### **Test (TS): May the Net Force Be with You**

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

Duration: 1 hr Scoring: 50 points

## **LESSON 6: DIAGNOSTIC**

### **Diagnostic: May the Net Force Be with You**

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

Duration: 1 hr Scoring: 25 points

## **UNIT 4: CRASH INTO ME**

### **LESSON 1: MOMENTUM**

#### **Study: Momentum and Newton's Second Law**

Crash! Impulse, momentum, and the Impulse-Momentum Theorem.

Duration: 1 hr 15 mins

#### **Lab: Losing My Marbles**

Complete a lab on momentum.

Duration: 1 hr 30 mins Scoring: 40 points

### **Quiz: Momentum**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 2: WORK SIMPLE MACHINES AND POWER**

### **Study: Power**

Jump into the world of work and simple machines.

Duration: 1 hr 15 mins

### **Discuss: Working Out**

What does working out really mean?

Duration: 0 hrs 30 mins Scoring: 20 points

### **Quiz: Work Simple Machines and Power**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 3: ENERGY**

### **Study: Work-Energy Theorem**

Learn about the many states of energy and several formulas.

Duration: 1 hr 15 mins

### **Discuss: Conserving Energy**

Discuss energy conservation.

Duration: 0 hrs 30 mins Scoring: 20 points

### **Quiz: Energy**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 4: CRASH INTO ME WRAP-UP**

### **Review: Crash into Me**

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

Duration: 0 hrs 50 mins

### **Practice: Energy**

Complete a set of practice problems on work and energy and submit the assignment to your teacher.

Duration: 1 hr Scoring: 50 points

### **Test (CS): Crash into Me**

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

Duration: 1 hr Scoring: 50 points

### **Test (TS): Crash into Me**

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

Duration: 1 hr Scoring: 50 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: Crash into Me**

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

Duration: 0 hrs 30 mins Scoring: 25 points

## **UNIT 5: I'M PICKIN' UP GOOD VIBRATIONS**

## LESSON 1: PROPERTIES OF WAVES

### Study: Types of Waves

Explore the types and properties of waves.

Duration: 1 hr 15 mins

### Lab: Smile and Wave

Complete a lab on waves using coiled springs.

Duration: 1 hr 30 mins Scoring: 40 points

### Quiz: Waves

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## LESSON 2: SOUND WAVES

### Study: Matching-Up Time

Learning about wave properties and the Doppler Effect

Duration: 1 hr 15 mins

### Quiz: Sound Waves

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## LESSON 3: ELECTROMAGNETIC WAVES

### Study: Light Spectrum

Introduction to electromagnetic waves and the properties of the light spectrum.

Duration: 1 hr 15 mins

### Quiz: Electromagnetic Waves

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## LESSON 4: OPTICS

### Study: Reflection and Mirrors

Reflecting on reflections, rays, and optic applications.

Duration: 1 hr 15 mins

### Lab: Bend It Like Beckham

Complete a lab on optics.

Duration: 1 hr 30 mins Scoring: 40 points

### Quiz: Optics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## LESSON 5: I'M PICKIN' UP GOOD VIBRATIONS WRAP-UP

### Review: I'm Pickin' Up Good Vibrations

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

Duration: 0 hrs 50 mins

### Practice: Waves

Complete a set of practice problems on waves and submit the assignment to your teacher.

Duration: 1 hr Scoring: 50 points

### Test (CS): I'm Pickin' Up Good Vibrations

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

Duration: 1 hr Scoring: 50 points

### **Test (TS): I'm Pickin' Up Good Vibrations**

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

Duration: 1 hr Scoring: 50 points

## **LESSON 6: DIAGNOSTIC**

### **Diagnostic: I'm Pickin' Up Good Vibrations**

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

Duration: 0 hrs 50 mins Scoring: 25 points

## **UNIT 6: IT'S ELECTRIC!**

### **LESSON 1: STATIC ELECTRICITY**

#### **Study: Electric Charge**

Investigate insulators, conductors, Coulomb's Law and Conservation of Charge.

Duration: 1 hr 15 mins

#### **Lab: A Shocking Tale**

Complete a lab on static electricity.

Duration: 1 hr 30 mins Scoring: 40 points

#### **Quiz: Static Electricity**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 2: CURRENT AND CIRCUITS**

#### **Study: Ohm's Law**

Confronting the world of circuits and answering the question "why don't birds on electric wires get shocked?"

Duration: 1 hr 15 mins

#### **Discuss: Current Events**

Discuss current.

Duration: 0 hrs 30 mins Scoring: 20 points

#### **Quiz: Current and Circuits**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 3: MAGNETISM**

#### **Study: Electromagnetism**

Moving into the worlds of magnets and magnetic fields.

Duration: 1 hr 15 mins

#### **Journal: Surprise Science**

Compose a journal entry in response to a question on magnetism and submit it to your teacher.

Duration: 0 hrs 30 mins Scoring: 20 points

#### **Quiz: Magnetism**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 4: IT'S ELECTRIC! WRAP-UP**

#### **Review: It's Electric!**

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

Duration: 0 hrs 50 mins

### **Practice: Electricity and Magnetism**

Complete a set of practice problems on electricity and magnetism and submit the assignment to your teacher.

Duration: 1 hr Scoring: 50 points

### **Test (CS): It's Electric!**

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

Duration: 1 hr Scoring: 50 points

### **Test (TS): It's Electric!**

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

Duration: 1 hr Scoring: 50 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: It's Electric!**

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

Duration: 1 hr Scoring: 25 points

## **UNIT 7: PHYSICAL SCIENCE SEMESTER 1 REVIEW AND EXAM**

### **LESSON 1: PHYSICAL SCIENCE SEMESTER 1**

#### **Review: Physical Science Semester 1**

Prepare for the semester exam by reviewing key concepts covered in Physical Science Semester 1.

Duration: 1 hr

#### **Exam: Physical Science Semester 1**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in Physical Science Semester 1.

Duration: 1 hr Scoring: 90 points

#### **Final Exam: Physical Science Semester 1**

Take a teacher-scored exam to demonstrate your mastery of concepts and skills covered in Physical Science Semester 1.

Duration: 1 hr Scoring: 90 points

## **UNIT 8: IT'S ELEMENTARY**

### **LESSON 1: STRUCTURE AND COMPONENTS OF THE ATOM**

#### **Study: It's Elementary**

Probing the periodic table; exploring states of matter

Duration: 1 hr 15 mins

#### **Study: Atomic Properties**

Describe atoms and the many models of describing atoms.

Duration: 1 hr 15 mins

#### **Lab: Braving the Elements**

Complete a lab on atomic structure.

Duration: 1 hr 30 mins Scoring: 40 points

#### **Quiz: Structure and Components of the Atom**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 2: THE PERIODIC TABLE**

#### **Study: Families**

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Understanding rows and columns on the Periodic Table

Duration: 1 hr 15 mins

**Discuss: Periodic Updates**

Discuss the periodic table.

Duration: 0 hrs 30 mins Scoring: 20 points

**Quiz: The Periodic Table**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

**LESSON 3: TRENDS AND PATTERNS**

**Study: Trends**

Sensing patterns in the Periodic Table.

Duration: 1 hr 15 mins

**Lab: Elements from Outer Space**

Complete a lab on trends and patterns.

Duration: 1 hr 30 mins Scoring: 40 points

**Quiz: Trends and Patterns**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

**LESSON 4: IT'S ELEMENTARY WRAP-UP**

**Review: Atomic Structure and the Periodic Table**

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

Duration: 0 hrs 50 mins

**Practice: Atomic Knowledge**

Complete a set of practice problems on elements and submit the assignment to your teacher.

Duration: 0 hrs 50 mins Scoring: 50 points

**Test (CS): It's Elementary**

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

Duration: 1 hr Scoring: 50 points

**Test (TS): It's Elementary**

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

Duration: 1 hr Scoring: 50 points

**LESSON 5: DIAGNOSTIC**

**Diagnostic: It's Elementary**

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

Duration: 1 hr Scoring: 25 points

**UNIT 9: BOND. MOLECULAR BOND.**

**LESSON 1: BONDING**

**Study: The Bond Family Tree**

Investigating ionic bonding, covalent bonding, and electronegativity.

Duration: 1 hr 15 mins

**Discuss: Bond and Determined**

Discuss bonding.

Duration: 0 hrs 30 mins Scoring: 20 points

### **Quiz: Bonding**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 2: SHAPES OF MOLECULES**

### **Study: Hydrogen Bonding**

Exploring exothermic and endothermic reactions.

Duration: 1 hr 15 mins

### **Lab: Edible Molecules**

Complete a lab on shapes of molecules.

Duration: 1 hr 30 mins Scoring: 40 points

### **Quiz: Shapes of Molecules**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 3: COMPOUNDS**

### **Study: Covalent Compounds**

Grappling with the Naming of Compounds.

Duration: 1 hr 15 mins

### **Lab: How Do You Color Your Eggs?**

Complete a lab on compounds.

Duration: 1 hr 30 mins Scoring: 40 points

### **Quiz: Compounds**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## **LESSON 4: BOND. MOLECULAR BOND. WRAP-UP**

### **Review: Bond. Molecular Bond.**

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

Duration: 0 hrs 50 mins

### **Practice: Bonding**

Complete a set of practice problems on bonding and compounds and submit the assignment to your teacher.

Duration: 1 hr Scoring: 50 points

### **Test (CS): Bond. Molecular Bond.**

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

Duration: 0 hrs 40 mins Scoring: 50 points

### **Test (TS): Bond. Molecular Bond.**

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

Duration: 0 hrs 40 mins Scoring: 50 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: Bond. Molecular Bond: Wrap-Up**

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

Duration: 0 hrs 40 mins Scoring: 25 points

## **UNIT 10: CHEMICAL REACTIONS**

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## LESSON 1: CHEMICAL EQUATIONS AND CONSERVATION LAWS

### Study: Balancing Equations

Duration: 1 hr 15 mins

### Lab: I'm Having a Reaction

Complete a lab on chemical reactions.

Duration: 1 hr 30 mins Scoring: 40 points

### Quiz: Chemical Equations and Conservation Laws

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## LESSON 2: REACTION TYPES

### Study: Combustion Precipitates and Solutions — Oh My!

Duration: 1 hr 15 mins

### Discuss: Discussing Chemical Reactions

Discuss reaction types.

Duration: 0 hrs 30 mins Scoring: 20 points

### Quiz: Reaction Types

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## LESSON 3: ACIDS AND BASES

### Study: Reactions

Responding to reactions.

Duration: 1 hr 15 mins

### Journal: Basic Hygiene

Compose a journal entry in response to a question on acids and bases and submit it to your teacher.

Duration: 0 hrs 30 mins Scoring: 20 points

### Quiz: Acids and Bases

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

## LESSON 4: CHEMICAL REACTIONS WRAP-UP

### Review: Chemical Reactions

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

Duration: 0 hrs 50 mins

### Practice: Chemical Reactions

Complete a set of practice problems on chemical reactions and submit the assignment to your teacher.

Duration: 0 hrs 50 mins Scoring: 50 points

### Test (CS): Chemical Reactions

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

Duration: 1 hr Scoring: 50 points

### Test (TS): Chemical Reactions

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

Duration: 1 hr Scoring: 50 points

## LESSON 5: DIAGNOSTIC

## Diagnostic: Chemical Reactions Wrap-Up

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

Duration: 0 hrs 30 mins Scoring: 25 points

## UNIT 11: JUMPIN' JACK FLASH — IT'S A GAS

### LESSON 1: HEAT

#### Study: Phase Changes

Duration: 1 hr 15 mins

#### Lab: Can You Feel the Heat?

Complete a lab on heat.

Duration: 1 hr 30 mins Scoring: 40 points

#### Quiz: Heat

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### LESSON 2: THE GAS LAWS

#### Study: The Pieces of the Puzzle

Duration: 1 hr

#### Discuss: Moonwalking

Discuss ideal gases.

Duration: 0 hrs 30 mins Scoring: 20 points

#### Quiz: The Gas Laws

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### LESSON 3: THERMODYNAMICS

#### Study: Entropy

Introduction to Entropy.

Duration: 1 hr

#### Lab: Homemade Ice Cream

Complete a lab on thermodynamics at home.

Duration: 1 hr 30 mins Scoring: 40 points

#### Quiz: Thermodynamics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### LESSON 4: JUMPIN' JACK FLASH & IT'S A GAS WRAP-UP

#### Review: Jumpin' Jack Flash — It's a Gas

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

Duration: 0 hrs 50 mins

#### Practice: Gases and Thermodynamics

Complete a set of practice problems on gases and thermodynamics and submit the assignment to your teacher.

Duration: 1 hr Scoring: 50 points

#### Test (CS): Jumpin' Jack Flash — It's a Gas

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

Duration: 0 hrs 40 mins Scoring: 50 points

### **Test (TS): Jumpin' Jack Flash — It's a Gas**

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

Duration: 0 hrs 40 mins Scoring: 50 points

### **LESSON 5: DIAGNOSTIC**

#### **Diagnostic: Jumpin' Jack Flash — It's a Gas**

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

Duration: 1 hr Scoring: 25 points

## **UNIT 12: NUCLEAR ENERGY IS DA BOMB**

### **LESSON 1: RADIOACTIVITY**

#### **Study: Decay Processes**

Digging into the Decay Process. Radioactivity.

Duration: 1 hr 15 mins

#### **Lab: Nuclear Decay Chain**

Complete a lab on radioactivity.

Duration: 1 hr 30 mins Scoring: 40 points

#### **Quiz: Radioactivity**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 2: NUCLEAR REACTIONS**

#### **Study: Nuclear Transmutations**

Duration: 1 hr

#### **Discuss: Conserving Your World**

Discuss nuclear reactions.

Duration: 0 hrs 30 mins Scoring: 20 points

#### **Quiz: Nuclear Reactions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 3: ENERGY OF THE FUTURE**

#### **Study: Where Do We Go from Here?**

Duration: 1 hr

#### **Journal: Not in My House?**

Compose a journal entry in response to a question on future energy sources and submit it to your teacher.

Duration: 0 hrs 30 mins Scoring: 20 points

#### **Quiz: Nuclear Energy**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 40 mins Scoring: 30 points

### **LESSON 4: NUCLEAR ENERGY IS DA BOMB WRAP-UP**

#### **Review: Nuclear Energy Is Da Bomb**

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

Duration: 0 hrs 50 mins

#### **Practice: A Pound of This and a Pound of That**

Complete a set of practice problems on nuclear energy and submit the assignment to your teacher.

Duration: 0 hrs 50 mins Scoring: 50 points

### **Test (CS): Nuclear Energy Is Da Bomb**

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

Duration: 0 hrs 40 mins Scoring: 50 points

### **Test (TS): Nuclear Energy Is Da Bomb**

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

Duration: 0 hrs 40 mins Scoring: 50 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: Nuclear Energy Is Da Bomb**

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

Duration: 1 hr Scoring: 25 points

## **UNIT 13: PHYSICAL SCIENCE SEMESTER 2 REVIEW AND EXAM**

### **LESSON 1: PHYSICAL SCIENCE SEMESTER 2**

#### **Review: Physical Science Semester 2**

Prepare for the semester exam by reviewing key concepts covered in Physical Science Semester 2.

Duration: 1 hr

#### **Exam: Physical Science Semester 2**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in Physical Science Semester 2.

Duration: 0 hrs 50 mins Scoring: 90 points

#### **Final Exam: Physical Science Semester 2**

Take a teacher-scored exam to demonstrate your mastery of concepts and skills covered in Physical Science Semester 2.

Duration: 0 hrs 50 mins Scoring: 90 points