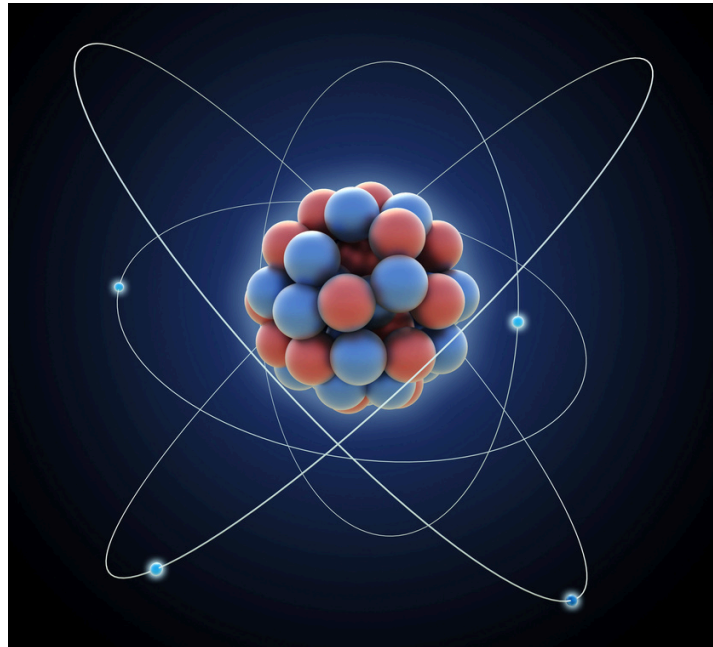


# MS-PS1 California Grade 7 Science - Full Standard

## Preferred Integrated Model

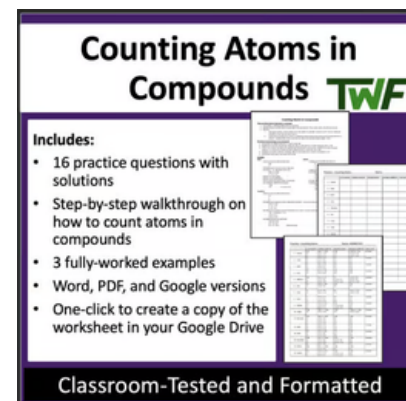
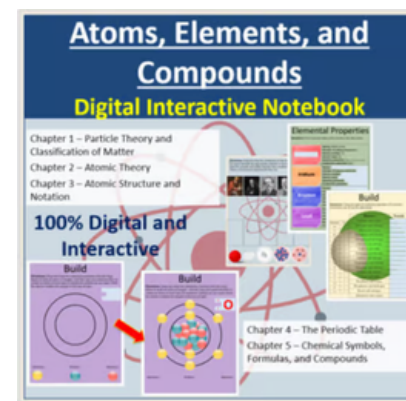
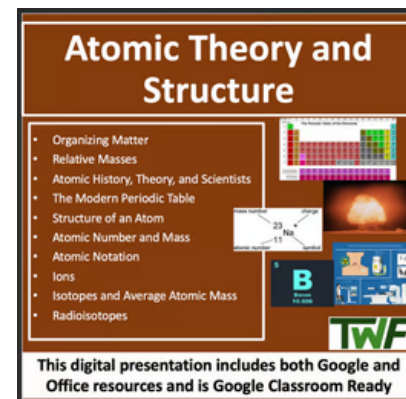
- ✓ Matter and its Interactions
- ✓ Complete MS-PS1 Standard for California 7<sup>th</sup> Grade Preferred Integrated Science Instruction Model
- ✓ Saves you over 75%



# Resources Included

## MS-PS1-1

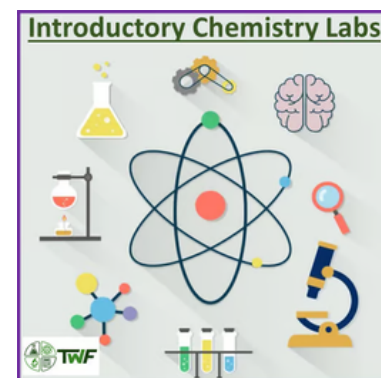
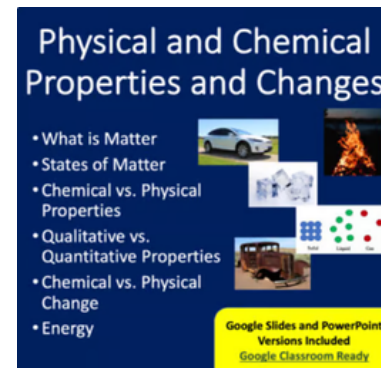
- Atomic Structure and Notation Lesson
- Atomic Theory and Model Lesson
- Atoms - History and Theory – Scavenger Hunt
- Atoms Elements and Compounds Digital Interactive Notebook – Chapters 2, 3, and 4
- Atoms Elements and the Periodic Table Word Search and Scramble
- Crash Course Chemistry the History of Atomic Chemistry
- The Periodic Table Lesson
- Counting Atoms in Compounds Worksheet
- Chemical Symbols Formulas and Compounds Lesson



# Resources Included

## MS-PS1-2

- Physical and Chemical Properties Lesson
- Physical and Chemical Changes – Scavenger Hunt
- Physical and Chemical Properties and Changes Science Word Sprint
- Physical and Chemical Properties Changes Lab Station Activity
- Physical and Chemical Properties Word Search and Scramble Activity
- Matter Lesson
- Chemical Reactions Lesson
- Density and Buoyancy Lesson
- Mass Volume Density and Buoyancy Scavenger Hunt
- Measuring Density Lab
- Introductory Chemistry Labs



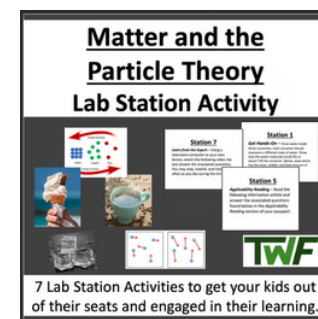
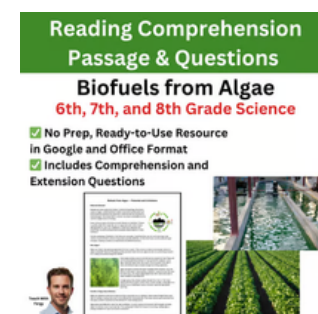
# Resources Included

## MS-PS1-3

- Synthetic Materials Lesson
- Synthetic Material Research Assignment
- Biofuels from Algae Reading
- The Development of Synthetic Insulin Reading

## MS-PS1-4

- Relationship Between Kinetic Energy Mass Speed Lesson
- Particle Motion Temperature and States Lesson
- The Insulator – Thermal Insulator Challenge
- Thermal Energy Change Reactions Experiments
- Matter and the Particle Theory Lab Station Activity
- Matter and Particle Theory Science Word Sprint
- Matter and the Particle Theory Infographic Assignment



# Resources Included

## MS-PS1-5

- Law of Conservation of Mass Lesson
- The Law of Conservation of Mass Worksheet
- Crash Course Chemistry The History of Atomic Chemistry
- Matter - Exploring the World Around You Reading
- Properties of Matter Reading

## MS-PS1-6

- Thermal Energy Change Reactions Experiments
- How Instant Ice Packs and Heat Packs Work Reading

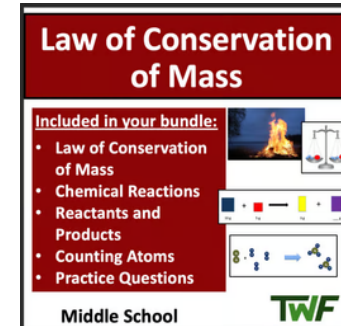
**Law of Conservation of Mass**

Included in your bundle:

- Law of Conservation of Mass
- Chemical Reactions
- Reactants and Products
- Counting Atoms
- Practice Questions

Middle School

TWF

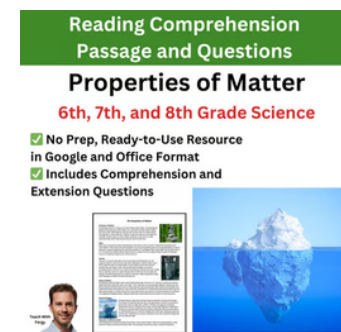
The cover features a red header with the title. Below it, a list of included resources is shown next to small icons: a flame for the Law of Conservation of Mass, a chemical reaction diagram for Chemical Reactions, a balance scale for Reactants and Products, and a molecular model for Counting Atoms. The TWF logo is in the bottom right corner.

**Reading Comprehension Passage and Questions**

**Properties of Matter**

6th, 7th, and 8th Grade Science

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions

The cover has a green header. It includes a small portrait of a man, a sample of the reading passage, and an image of an iceberg floating in water.

**Designing a Thermal Energy Transfer Device Using Chemical Reactions**

The cover features a large photo of a student in a lab coat and gloves holding a test tube. Below the photo, it lists '4 activities' and '2 endothermic and 2 exothermic reactions'. A small portrait of a man is in the bottom left corner.

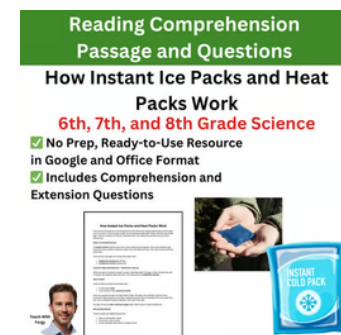
**Reading Comprehension Passage and Questions**

**How Instant Ice Packs and Heat Packs Work**

Packs Work

6th, 7th, and 8th Grade Science

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions

The cover has a green header. It includes a small portrait of a man, a sample of the reading passage, and an image of an instant cold pack.

# UPGRADE to the Bundle

## California Grade 7 Science Full Year Science Curriculum

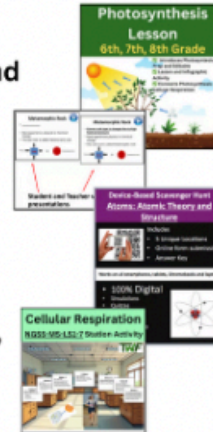
### Preferred Integrated Model

- ✓ Complete Curriculum for California 7<sup>th</sup> Grade Preferred Integrated Science Instruction Model
- ✓ Over 150 Resources Included, Grouped into Standard and Presented in the Preferred Order According to the California Department of Education
- ✓ Save you over 75%



Everything You Need to Teach 7th  
Grade Science in California using the  
Preferred Model

- Lesson Bundles
- Lessons in PowerPoint and Google
- Homework and/or Worksheets Provided for Many Lessons
- Teacher and Student Versions of Each Lesson
- Many Activities, Projects, Review Activities, STEM Challenges



### NGSS Included

- MS-LS1 From Molecules to Organisms: Structures and Processes
- MS-LS2 Ecosystems: Interactions, Energy, and Dynamics
- MS-ESS2 Earth's Systems
- MS-ESS3 Earth and Human Activity
- MS-PS1 Matter and Its Interactions
- MS-ETS1 Engineering Design



**CLICK HERE**



Save 75% and get the FULL  
Year Curriculum

# Everything You Need to Teach 7th Grade Science in California using the Preferred Model for MS-PS1

## Lessons

### Periodic Table

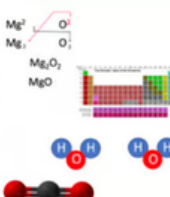
- Before the Periodic Table
- Mendeléev
- The Current Periodic Table
- The Elements
- Atomic Number
- Atomic Mass
- Valence Electrons
- Metals, Non-Metals, and Metalloids
- Columns and Families
- Rows and Periods



Google Slides and PowerPoint Versions Included  
Google Classroom Ready

### Chemical Symbols, Formulas & Compounds

- Symbols
- Element Names
- Counting Atoms
- Naming Compounds
- Combining Capacity
- Building a Molecule
- Criss-Cross Rule
- Naming Compounds



Google Slides and PowerPoint Versions Included  
Google Classroom Ready

### Density & Buoyancy

- Mass and Volume
- What is density?
- $D = m/V$
- Solving Density Problems
- Archimedes
- Buoyancy
- Applications
- Floating
- Oil Spills



Google Slides and PowerPoint Versions Included  
Google Classroom Ready

### Chemical Reactions

- Chemical Reactions
- Reactants and Products
- Describing Chemical Reactions
- Symbols in Equations
- Energy in Chemical Reactions
- Practice



This digital presentation includes both Google and Office resources and is Google Classroom Ready

### Atomic Structure and Notation

- Atoms and subatomic particles
  - Protons, Neutrons, and Electrons
- Atomic Number
- Atomic Mass
- Isotopes
- Calculating Average Atomic Mass
- Periodic Table Notation
- Chemical Symbol



Google Slides and PowerPoint Versions Included  
Google Classroom Ready

### Physical and Chemical Properties and Changes

- What is Matter
- States of Matter
- Chemical vs. Physical Properties
- Qualitative vs. Quantitative Properties
- Chemical vs. Physical Change
- Energy



Google Slides and PowerPoint Versions Included  
Google Classroom Ready

### Atomic Theory and Structure

- Organizing Matter
- Relative Masses
- Atomic History, Theory, and Scientists
- The Modern Periodic Table
- Structure of an Atom
- Atomic Number and Mass
- Atomic Notation
- Ions
- Isotopes and Average Atomic Mass
- Radioisotopes

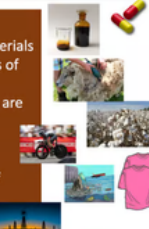


TWF

### Synthetic Materials

Included in your bundle:

- Synthetic vs Natural Materials
- Advantage and Examples of Natural Materials
- How Synthetic Materials are Made
- Examples of Synthetic Materials
- Environmental Impact of Synthetic Materials
- Medicines

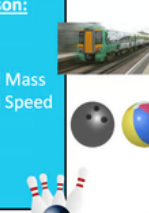


TWF

### Relationship Between Kinetic Energy Mass and Speed

Included in your Lesson:

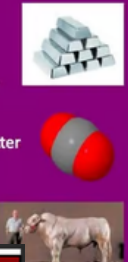
- What Energy Is
- Kinetic Energy
- Kinetic Energy and Mass
- Kinetic Energy and Speed
- Examples
- Practice
- Student-Designed Experiment



Middle School TWF

### Matter

1. What is Matter
2. Mass and Volume
3. The Particle Theory of Matter
4. States (Phases) of Matter



### Law of Conservation of Mass

Included in your bundle:

- Law of Conservation of Mass
- Chemical Reactions
- Reactants and Products
- Counting Atoms
- Practice Questions



Middle School TWF

### Particle Motion, Temperature, and States of Matter

Included in your bundle:

- Matter
- States of Matter
- Solids, Liquids, and Gases
- State Conversions
- Particle Motion and Kinetic Energy
- Temperature
- Heat Transfer and Thermal Energy



Middle School

# Everything You Need to Teach 7th Grade Science in California using the Preferred Model for MS-PS1

## Activities

**Device-Based Scavenger Hunt**  
**Atoms: Atomic Theory and Structure**

Includes:

- 5 Unique Locations
- Online form submission
- Answer Key

Works on all smartphones, tablets, Chromebooks and laptops

• 100% Digital

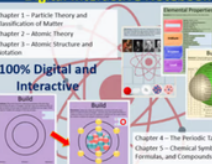
- Simulations
- Quizzes
- Videos
- Games
- Word Scramble
- and more



**Atoms, Elements, and Compounds**  
**Digital Interactive Notebook**

Chapter 1 - Particle Theory and Classification of Matter  
Chapter 2 - Atomic Theory  
Chapter 3 - Atomic Structure and Notation  
Chapter 4 - The Periodic Table  
Chapter 5 - Chemical Symbols, Formulas, and Compounds

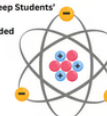
100% Digital and Interactive



**Crash Course Chemistry**  
**#37: The History of Atomic Chemistry**

Classroom Ready - Just Print and Go!  
Active Engagement - Keep Students' Attention  
Direct Video Link Included

Includes Student Copy and Answer Keys



**Counting Atoms in Compounds** TWF

Includes:

- 16 practice questions with solutions
- Step-by-step walkthrough on how to count atoms in compounds
- 3 fully-worked examples
- Word, PDF, and Google versions
- One-click to create a copy of the worksheet in your Google Drive

Classroom-Tested and Formatted

**Atoms, Elements, and the Periodic Table Word Search and Scramble**

THREE Activities in One!

1. Basic 25-Term Word Search
2. Scrambled Words Word Search
3. Word Scramble and Define Activity

TWF



**Physical and Chemical Properties Word Search and Scramble** TWF

THREE Activities in One!

1. Basic 25-Term Word Search
2. Scrambled Words Word Search
3. Word Scramble and Define Activity



**Device-Based Scavenger Hunt**  
**Physical and Chemical Changes**

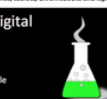
Includes:

- 5 Unique Locations
- Online form submission
- Answer Key

Works on all smartphones, tablets, Chromebooks and laptops

• 100% Digital

- Simulations
- Quizzes
- Videos
- Games
- Word Scramble
- and more



**Device-Based Scavenger Hunt**  
**Mass, Volume, Density, and Buoyancy**

Includes:

- 5 Unique Locations
- Online form submission
- Answer Key

Works on all smartphones, tablets, Chromebooks, and laptops

• 100% Digital

- Simulations
- Quizzes
- Videos
- Games
- and more



**Reading Comprehension Passage and Questions**  
**Properties of Matter**  
6th, 7th, and 8th Grade Science

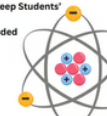
No Prep, Ready-to-Use Resource in Google and Office Format  
Includes Comprehension and Extension Questions



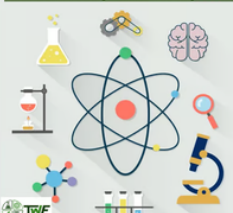
**Crash Course Chemistry**  
**#37: The History of Atomic Chemistry**

Classroom Ready - Just Print and Go!  
Active Engagement - Keep Students' Attention  
Direct Video Link Included

Includes Student Copy and Answer Keys



**Introductory Chemistry Labs**



**Physical and Chemical Properties & Changes Lab Station Activity**

7 Lab Station Activities to get your kids out of their seats and engaged in their learning



**Science Word Sprint!**  
**Physical and Chemical Properties and Changes**

Students race against the clock to guess scientific terms without using the forbidden terms.

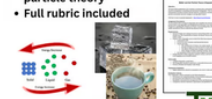
Physical Sciences



**MATTER AND THE PARTICLE THEORY INFOGRAPHIC ASSIGNMENT**

Students are tasked with creating an infographic that demonstrates their understanding of matter and the particle theory

Full rubric included



**Matter and the Particle Theory**  
**Lab Station Activity**

7 Lab Station Activities to get your kids out of their seats and engaged in their learning.



**Matter**  
**Science Reading Comprehension Article - Grade 8 and Up**

Improve your students' Scientific Literacy and Analysis Skills, use as an Emergency Substitute Plan or Create Applicability in your Classroom



**Reading Comprehension Passage & Questions**  
**Biofuels from Algae**  
6th, 7th, and 8th Grade Science

No Prep, Ready-to-Use Resource in Google and Office Format  
Includes Comprehension and Extension Questions



**Reading Comprehension Passage & Questions**  
**Development of Synthetic Insulin**  
6th, 7th, and 8th Grade Science

No Prep, Ready-to-Use Resource in Google and Office Format  
Includes Comprehension and Extension Questions



**The Insulator - Thermal Insulator Challenge**

Classroom Ready - Just Print and Go!  
Active Engagement - Keep Students' Attention  
Direct Video Link Included

Includes Word and PDF Versions



**Designing a Thermal Energy Transfer Device Using Chemical Reactions**

4 activities  
2 endothermic and 2 exothermic reactions



**Science Word Sprint!**  
**Matter and the Particle Theory**

Students race against the clock to guess scientific terms without using the forbidden terms.

Physical Sciences



**Reading Comprehension Passage and Questions**  
**How Instant Ice Packs and Heat Packs Work**  
6th, 7th, and 8th Grade Science

No Prep, Ready-to-Use Resource in Google and Office Format  
Includes Comprehension and Extension Questions



# The Standard is Explained and the Resources it Incorporates are Outlined

## Next Generation Science Standards Package MS-PS1 Matter and its Interactions

**Note:** There may be resources that overlap between the standards. Simply choose the order that best fits your classroom. Also, there are more resources here than you will most likely decide to use. I have provided extra so you can make the best decision for your students on what is best to include.

**MS-PS1-1.** Develop models to describe the atomic composition of simple molecules and extended structures. [Clarification Statement: Emphasis is on developing models of molecules that vary in complexity. Examples of simple molecules could include ammonia and methanol. Examples of extended structures could include sodium chloride or diamonds. Examples of molecular-level models could include drawings, 3D ball and stick structures, or computer representations showing different molecules with different types of atoms.] [Assessment Boundary: Assessment does not include valence electrons and bonding energy, discussing the ionic nature of subunits of complex structures, or a complete description of all individual atoms in a complex molecule or extended structure is not required.]

### Resources:

- Atomic Structure and Notation Lesson
- Atomic Theory and Model Lesson
- Atoms - History and Theory – Scavenger Hunt
- Atoms Elements and Compounds Digital Interactive Notebook – Chapters 2, 3, and 4
- Atoms Elements and the Periodic Table Word Search and Scramble
- Crash Course Chemistry The History of Atomic Chemistry
- The Periodic Table Lesson
- Counting Atoms in Compounds Worksheet
- Chemical Symbols Formulas and Compounds Lesson

**MS-PS1-2.** Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

[Clarification Statement: Examples of reactions could include burning sugar or steel wool, fat reacting with sodium hydroxide, and mixing zinc with hydrogen chloride.] [Assessment Boundary: Assessment is limited to analysis of the following properties: density, melting point, boiling point, solubility, flammability, and odor.]

### Resources:

- Physical and Chemical Properties Lesson
- Physical and Chemical Changes – Scavenger Hunt
- Physical and Chemical Properties and Changes Science Word Sprint
- Physical and Chemical Properties Changes Lab Station Activity
- Physical and Chemical Properties Word Search and Scramble Activity
- Matter Lesson
- Chemical Reactions Lesson
- Density and Buoyancy Lesson
- Mass Volume Density and Buoyancy Scavenger Hunt
- Measuring Density Lab
- Introductory Chemistry Labs

**MS-PS1-3.** Gather and make sense of information to describe that synthetic materials come from natural resources and impact society. [Clarification Statement: Emphasis is on natural resources that undergo a chemical process to form the synthetic material. Examples of new materials could include new medicine, foods, and alternative fuels.] [Assessment Boundary: Assessment is limited to qualitative information.]

### Resources:

- Synthetic Materials Lesson
- Synthetic Material Research Assignment
- Biofuels from Algae Reading
- The Development of Synthetic Insulin Reading

**MS-PS1-4.** Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. [Clarification Statement: Emphasis is on qualitative molecular-level models of solids, liquids, and gases to show that adding or removing thermal energy increases or decreases kinetic energy of the particles until a change of state occurs. Examples of models could include drawings and diagrams. Examples of particles could include molecules or inert atoms. Examples of pure substances could include water, carbon dioxide, and helium.]

### Resources:

- Relationship Between Kinetic Energy Mass Speed Lesson
- Particle Motion Temperature and States Lesson
- The Insulator – Thermal Insulator Challenge
- Thermal Energy Change Reactions Experiments
- Matter and the Particle Theory Lab Station Activity
- Matter and Particle Theory Science Word Sprint
- Matter and the Particle Theory Infographic Assignment

**MS-PS1-5.** Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. [Clarification Statement: Emphasis is on law of conservation of matter and on physical models or drawings, including digital forms, that represent atoms.] [Assessment Boundary: Assessment does not include the use of atomic masses, balancing symbolic equations, or intermolecular forces.]

### Resources:

- Law of Conservation of Mass Lesson
- The Law of Conservation of Mass Worksheet
- Crash Course Chemistry The History of Atomic Chemistry
- Matter - Exploring the World Around You Reading
- Properties of Matter Reading

**MS-PS1-6.** Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes. \* [Clarification Statement: Emphasis is on the design, controlling the transfer of energy to the environment, and modification of a device using factors such as type and concentration of a substance. Examples of designs could involve chemical reactions such as dissolving ammonium chloride or calcium chloride.] [Assessment Boundary: Assessment is limited to the criteria of amount, time, and temperature of substance in testing the device.]

### Resource:

- Thermal Energy Change Reactions Experiments
- How Instant Ice Packs and Heat Packs Work Reading

# **Who is this Bundle for?**

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- **Teachers who teach grade 7 science in California and who use the ‘Preferred Integrated Model’**
- **Teachers who want a variety of resources at their fingertips in order to meet the standards**
- **Teachers who don’t have time to develop their own resources or organize what to teach and when**