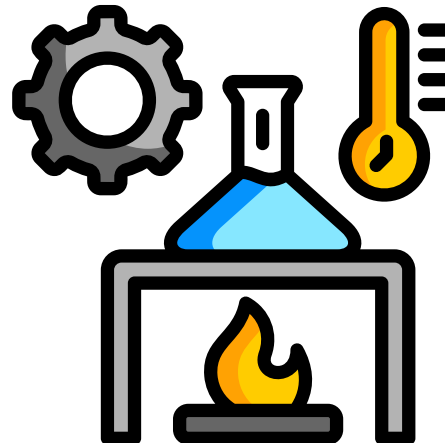


MS-PS3 California Grade 6 Science - Full Standard

Preferred Integrated Model

- ✓ **Energy**
- ✓ **Complete Standard for California 6th Grade Preferred Integrated Science Instruction Model**
- ✓ **Saves you over 75%**



Resources Included

MS-PS3-3

- The Insulator – Thermal Insulator Challenge
- Thermal Energy Change Reactions Experiments and Demonstrations
- Solar Oven STEM Engineering Challenge

MS-PS3-4

- Thermal Energy Temperature and Heat Lesson
- Particle Motion, Temperature, and States of Matter Lesson
- Relationship Between Kinetic Energy, Mass, and Speed Lesson
- How Does the Type of Matter Affect Heat Transfer – Activity
- How Does Mass Affect Temperature Change - Activity

MS-PS3-5

- Thermal Energy Temperature and Heat Lesson
- When Kinetic Energy Changes - Energy Transfers Lesson
- Heat by Friction – Activity
- Crash Test Challenge - Activity

The Insulator – Thermal Insulator Challenge

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

[WATCH VIDEO](#)



Includes Word and PDF Versions

Thermal Energy, Temperature, & Heat Transfer 6th, 7th, 8th Grade Lesson

- ✓ Comprehensive Content Overview – Covers Thermal Energy, Temperature, Particle Motion, and Heat Transfer.
- ✓ Student-Friendly Format – Clear visuals and comparisons support understanding of complex concepts.



When Kinetic Energy Changes Lesson 6th, 7th, 8th Grade

- ✓ Comprehensive Content Overview – Covers how changes in motion cause energy transfer and temperature changes.
- ✓ Student-Friendly Format – Clear visuals and comparisons support understanding of complex concepts.



UPGRADE to the Bundle

California Grade 6 Science Full Year Science Curriculum

Preferred Integrated Model

- ✓ Complete Curriculum for California 6th Grade Preferred Integrated Science Instruction Model
- ✓ Over 125 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 6th Grade Science in California using the Preferred Model

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



NGSS Included

- MS-LS1 From Molecules to Organisms: Structures and Processes
- MS-LS3 Heredity: Inheritance and Variation of Traits
- MS-ESS2 Earth's Systems
- MS-ESS3 Earth and Human Activity
- MS-PS3 Energy
- MS-ETS1 Engineering Design



CLICK HERE



Save 75% and get the FULL
Year Curriculum

Everything You Need to Teach 6th Grade Science in California using the Preferred Model for MS-PS3

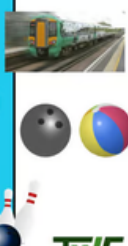
Lessons

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



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



Thermal Energy, Temperature, & Heat Transfer

6th, 7th, 8th Grade Lesson

- Comprehensive Content Overview – Covers Thermal Energy, Temperature, Particle Motion, and Heat Transfer.
- Student-Friendly Format – Clear visuals and comparisons support understanding of complex concepts.



When Kinetic Energy Changes Lesson

6th, 7th, 8th Grade

- Comprehensive Content Overview – Covers how changes in motion cause energy transfer and temperature changes.
- Student-Friendly Format – Clear visuals and comparisons support understanding of complex concepts.



Activities

The Insulator – Thermal Insulator Challenge

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

WATCH VIDEO



Includes Word and PDF Versions



SOLAR OVEN ENGINEERING CHALLENGE

MIDDLE SCHOOL



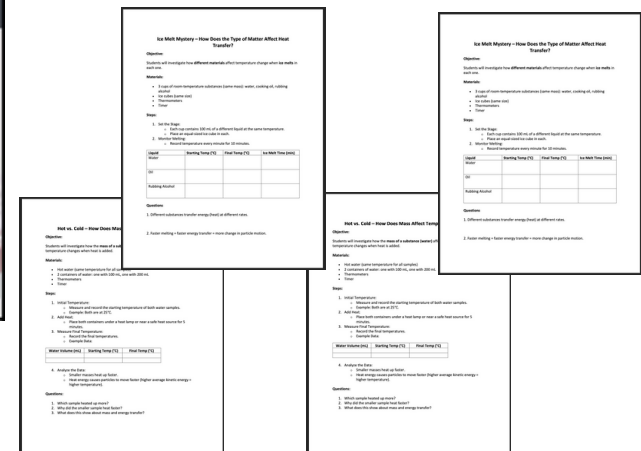
STEM CHALLENGE



Designing a Thermal Energy Transfer Device Using Chemical Reactions



- 4 activities
- 2 endothermic and 2 exothermic reactions

The Standard is Explained and the Resources it Incorporates are Outlined

Next Generation Science Standards Package MS PS3 Energy

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-PS3-3. Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer. [Clarification Statement: Examples of devices could include an insulated box, a solar cooker, and a Styrofoam cup.] [Assessment Boundary: Assessment does not include calculating the total amount of thermal energy transferred.]

Resources:

- The Insulator – Thermal Insulator Challenge
- Thermal Energy Change Reactions Experiments and Demonstrations
- Solar Oven STEM Engineering Challenge

MS-PS3-4. Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample. [Clarification Statement: Examples of experiments could include comparing final water temperatures after different masses of ice melted in the same volume of water with the same initial temperature, the temperature change of samples of different materials with the same mass as they cool or heat in the environment, or the same material with different masses when a specific amount of energy is added.] [Assessment Boundary: Assessment does not include calculating the total amount of thermal energy transferred.]

Resources:

- Thermal Energy Temperature and Heat Lesson
- Particle Motion, Temperature, and States of Matter Lesson
- Relationship Between Kinetic Energy, Mass, and Speed Lesson
- How Does the Type of Matter Affect Heat Transfer – Activity
- How Does Mass Affect Temperature Change – Activity

MS-PS3-5. Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object. [Clarification Statement: Examples of empirical evidence used in arguments could include an inventory or other representation of the energy before and after the transfer in the form of temperature changes or motion of object.] [Assessment Boundary: Assessment does not include calculations of energy.]

Resources:

- Thermal Energy Temperature and Heat Lesson
- When Kinetic Energy Changes Energy Transfers
- Heat by Friction – Activity
- Crash Test Challenge - Activity

Who is this Bundle for?

- **Teachers who teach grade 6 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**