

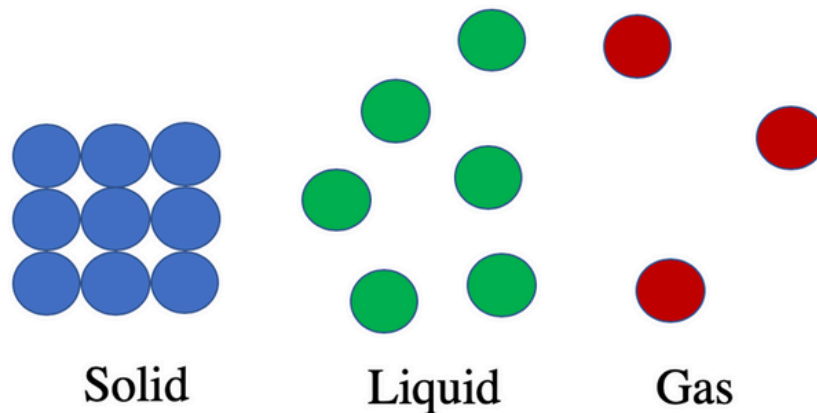
NGSS MS-PS1-4

Curriculum Bundle

Thermal Energy & Particle Motion

✓ 2 Lessons and 5 Activities

✓ Everything You Need to Teach NGSS MS-PS1-4



Energy Increase



Resources Included

✓ 2 Lesson

✓ 5 Activities

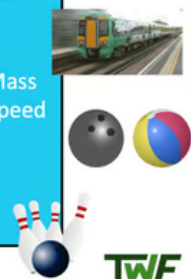
- Relationship Between Kinetic Energy Mass Speed Lesson
- Particle Motion Temperature and States Lesson
- The Insulator – Thermal Insulator Challenge
- Thermal Energy Change Reactions Experiments
- Matter and the Particle Theory Lab Station Activity
- Matter and Particle Theory Science Word Sprint
-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

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 



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

Designing a Thermal Energy Transfer Device Using Chemical Reactions



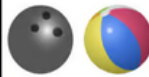
 4 activities
2 endothermic and 2 exothermic reactions

Everything You Need to Teach NGSS MS-PS1-4

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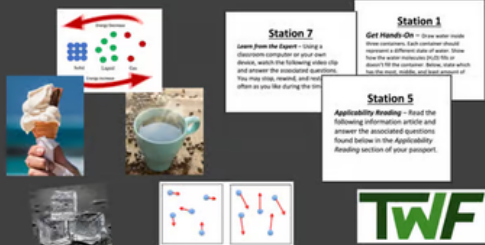
Particle Motion, Temperature, and States of Matter

Included in your bundle:

- Matter
- States of Matter
- Solids, Liquids, and Gases
- State Conversions
- Particle Motion and Kinetic Energy



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.

Science Word Sprint! Matter and the Particle Theory

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

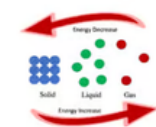
TWF

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



TWF

The Standard is Explained and the Resources it Incorporates are Outlined

Next Generation Science Standards Package MS PS1 Matter and its Interactions

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.]

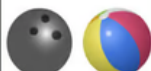
Resources:

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Who is this Bundle for?

- **Teachers who teach middle school science and use the NGSS**
- **Teachers who want multiple resources at their fingertips including lessons and a variety of activities, in order to meet the standard**
- **Teachers who don't have time to develop their own resources or organize what to teach and when**