

NGSS MS-PS3-2

Curriculum Bundle

Potential Energy & Distance Modeling

- ✓ 2 Lessons and 1 Activity
- ✓ Everything You Need to Teach NGSS MS-PS3-2

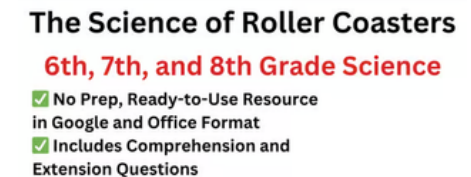
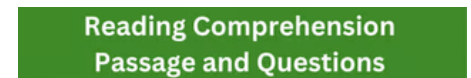
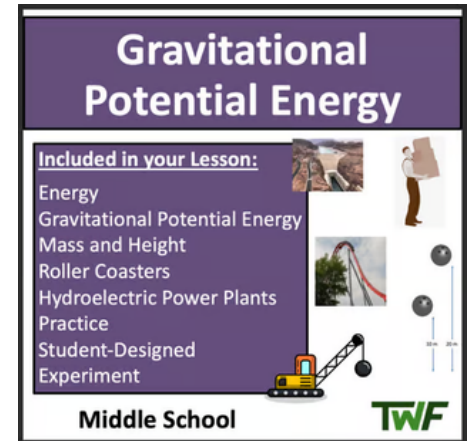
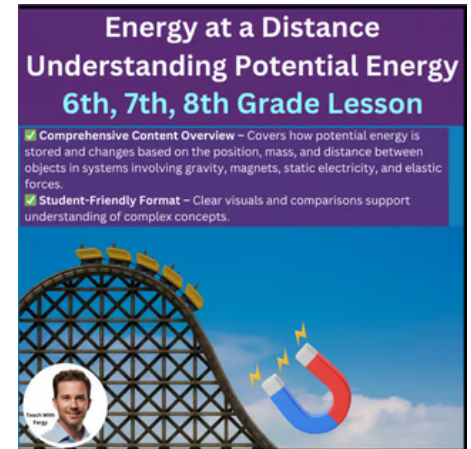


Resources Included

✓ 2 Lessons

✓ 1 Activity

- Energy at a Distance - Understanding Potential Energy – Lesson
- Gravitational Potential Energy – Lesson
- The Science of Roller Coasters - Reading



Everything You Need to Teach NGSS MS-PS3-2

Energy at a Distance Understanding Potential Energy 6th, 7th, 8th Grade Lesson

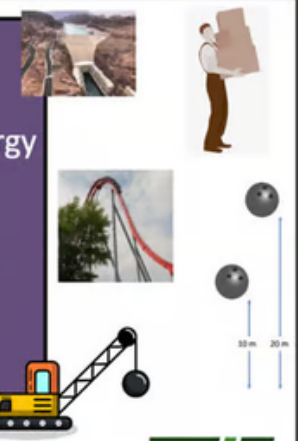
- ✓ **Comprehensive Content Overview** – Covers how potential energy is stored and changes based on the position, mass, and distance between objects in systems involving gravity, magnets, static electricity, and elastic forces.
- ✓ **Student-Friendly Format** – Clear visuals and comparisons support understanding of complex concepts.



Gravitational Potential Energy

Included in your Lesson:

- Energy
- Gravitational Potential Energy
- Mass and Height
- Roller Coasters
- Hydroelectric Power Plants
- Practice
- Student-Designed Experiment



Middle School



Reading Comprehension Passage and Questions

The Science of Roller Coasters

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

California Preferred Integrated NGSS Course Model – Grade 8 MS PS3 Energy

MS PS3-2: Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.

Emphasis is on relative amounts of potential energy, not on calculations of potential energy. Examples of objects within systems interacting at varying distances could include: the Earth and either a roller coaster cart at varying positions on a hill or objects at varying heights on shelves, changing the direction/orientation of a magnet, and a balloon with static electrical charge being brought closer to a classmate's hair. Examples of models could include representations, diagrams, pictures, and written descriptions of systems.

Assessment Boundary: Assessment is limited to two objects and electric, magnetic, and gravitational interactions.

Resources:

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Energy at a Distance Understanding Potential Energy 6th, 7th, 8th Grade Lesson

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Teach With a Twf

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Middle School

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Teach With a Twf

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**