

8th Grade Science Kinetic and Potential Energy

Standards

MS-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object. Next Generation Science Standards Science

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. Next Generation Science Standards Science

Objective

Students will understand and demonstrate how an object can have different potential energy due to its position. Students will also understand how kinetic energy is correlated with mass and speed

Critical Questions

1. What is the difference between potential and kinetic energy?
2. What causes potential energy to change into kinetic energy and vice versa?

Bellringer

Watch Video on potential energy
<https://youtu.be/Jnj8mc04r9E>

Engage

1. Finish kinetic energy calculations and graph worksheet
2. Potential Energy
<http://bit.ly/2IJW57z>

Assessment

Notes

8th Grade Science Kinetic and Potential Energy

Standards

MS-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object. Next Generation Science Standards Science

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. Next Generation Science Standards Science

Objective

Students will understand and demonstrate how an object can have different potential energy due to its position. Students will also understand how kinetic energy is correlated with mass and speed

Critical Questions

1. What is the difference between potential and kinetic energy?
2. What causes potential energy to change into kinetic energy and vice versa?

Bellringer

Finish kinetic and/or potential energy calculation worksheets

Engage

1. Get in groups and discuss mousetrap cars
2. Began building mousetrap cars

Assessment

Notes

8th Grade Science Kinetic and Potential Energy

Standards

MS-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object. Next Generation Science Standards Science

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. Next Generation Science Standards Science

Objective

Students will understand and demonstrate how an object can have different potential energy due to its position. Students will also understand how kinetic energy is correlated with mass and speed

Critical Questions

1. What is the difference between potential and kinetic energy?
2. What causes potential energy to change into kinetic energy and vice versa?

Bellringer

Watch mousetrap car video
<https://youtu.be/f0GMSfBmWcc>

Engage

Continue building mousetrap car

Assessment

Notes

8th Grade Science Kinetic and Potential Energy

Standards

MS-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object. Next Generation Science Standards Science

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. Next Generation Science Standards Science

Objective

Students will understand and demonstrate how an object can have different potential energy due to its position. Students will also understand how kinetic energy is correlated with mass and speed

Critical Questions

1. What is the difference between potential and kinetic energy?
2. What causes potential energy to change into kinetic energy and vice versa?

Bellringer

Quiz on Kinetic and Potential Energy

Engage

Continue building mousetrap car

Assessment

Notes

8th Grade Science No School