



Summer 2020 Lesson

Class: Science

Grade Band: 2-5

Teacher: Bickel

Lesson: Kinetic vs Potential energy

Objective: We want to use objects to demonstrate potential and kinetic energy and to show energy transference.

Materials: 2 markers, your hands,

You can describe energy as either potential or kinetic energy. Potential energy is the energy that an object has when it is not moving. The opposite of potential energy is kinetic energy. Kinetic energy is the energy that an object has when its moving. Let's do some activities to learn more about these two types of energy.

Activity #1 Hold one of your markers still in your hand. That marker has kinetic energy. As soon as you drop it the marker has kinetic energy until it starts moving once again.

Activity #2 Explore how kinetic energy can be transferred from an object to another. Try this by having one marker just sitting on the group and then roll the other marker into it. When a stationary marker is hit by another marker, and the still marker begins to move that is an example of energy transference. Try to figure out other objects you can use from around your house to cause energy to be transferred from a moving object to an object that is sitting still.

Other ways to investigate: See if you can discover how midair collisions affect movement See how the wind affects the movement of objects. If you still have your paper airplanes use them to see the energy transference that happens when two objects collide mid-air. If you have a fan at home, see how the wind generated from the fan can cause objects with potential energy to become objects with kinetic energy.

Vocabulary: kinetic energy, potential energy, transference