Write either potential or kinetic energy for each description.

- 1. A baseball bat on the ground.
- 2. A runner in the starting blocks.
- 3. A large wrecking ball hitting a building.
- 4. Someone pushing a car.
- 5. A train traveling down the tracks.
- 6. A rubber band stretched.
- 7. A football thrown down the field.











8. A roller coaster at the top of a hill.





9. A mousetrap set.



10. A person diving off a diving board.

Write either potential or kinetic energy for each description.



7. A football thrown down the field. 4/7

Kinetic

8. A roller coaster at the top of a hill.

Potential



9. A mousetrap set.

Potential



10. A person diving off a diving board.

Kinetic

Fill in the missing part of the table.

POTENTIAL ENERGY	KINETIC ENERGY
A baseball bat lying on the ground.	
A runner in the starting blocks.	
	A large wrecking ball hitting a building.
	Someone pushing a car.
	A train traveling down the tracks.
A rubber band stretched.	
	A football thrown down the field.
A roller coaster at the top of a hill.	
A mousetrap set.	
	A person diving off a diving board.

NAME	KEY	

Fill in the missing part of the table.

POTENTIAL ENERGY	KINETIC ENERGY
A baseball bat lying on the ground.	A baseball bat hitting a ball.
A runner in the starting blocks.	A runner running in a race.
A large wrecking ball swung back ready hit a building.	A large wrecking ball hitting a building.
A car standing still.	Someone pushing a car.
A train stopped.	A train traveling down the tracks.
A rubber band stretched.	A rubber band being shot across the room.
A football lying on the ground.	A football thrown down the field.
A roller coaster at the top of a hill.	A roller coaster accelerated down a hill.
A mousetrap set.	A mousetrap snapping shut.
A person standing on a diving board.	A person diving off a diving board.

Extension Activity

In my sixth grade class, my students make "marble roller coasters" to experience potential and kinetic energy.

Materials: 1 ½ inch pipe insulation (sliced into 2 "half circle" parts.) Marbles Tape Space!

I purchased the pipe insulation on my local Lowes store. I used scissors to cut each piece into 2 pieces (half circles).

We have 3 group challenges. On day one we have the "hill" competition. Students have 40 minutes to construct a roller coaster that will successfully navigate the most "hills". We discuss how if the marble is not making it up the next hill, they need to increase their potential energy. If the marble is flying off the track, they need to decrease their potential energy.



One day two, we have the "loop" competition. In 40 minutes, groups compete to make a roller coaster that navigates the largest number of loops.



On day three, they can mix the hills and loops and have fun constructing, using problem solving skills, and enjoy team building!