

Name \_\_\_\_\_

# Energy Transfer Lab Stations

Directions: Use the supplies at each of the lab stations to create a machine with at least **2** energy transfers (potential -> kinetic, twice). Each station has different supplies and can complete different tasks, so use your imagination.

<b>Station #</b>	<b>List of Supplies</b>	<b>Point of Greatest Potential Energy</b>	<b>Diagram of Machine Label Potential and Kinetic Energy</b>
<b>1</b>	Ring stand with ring, PVC pipe, String, 2 Legos, Spoon, Tennis ball		
<b>2</b>	Car track, 4 dominos, car, marble, wood block		
<b>3</b>	Wooden wedge, 4 dominos, wooden block, tennis ball, wooden car		
<b>4</b>	Ring stand with ring, 2 pulleys, roll of tape, ruler, car, pencil, marble		
<b>5</b>	Paper towel roll, wheel and axle, marble, cup, 2 Legos, single tire		
<b>6</b>	Car, Lego, 2 dominos, dice, popsicle stick, wood block		

7	Ring stand with ring, 2 pulleys with string, 2 cups, 6 marbles, car, wooden block, car track		
8	Wooden block, wooden wedge, 6 dominos, 2 car tracks, ping pong ball, wheels and axel		
9	Ring stand with ring, funnel, marble, paper towel roll, medicine cup, Legos, ping pong ball		

### Review Questions

Directions – Answer the following questions after completing each station.

1. Which station was the easiest to create a 2 energy transfer machine?
2. Which station was the most challenging to create a 2 energy transfer machine?
3. What are some common materials you might have at home that could create a multiple energy transfer machine?
4. Explain in your own words how energy is converted from potential to kinetic. (3-5 sentences)
5. Explain how you can use simple machines that transfer energy many different times to complete one simple task. (3-5 sentences)