

Homemade Roller Coaster: Student Data Sheet

1. How far did the marble roll the first time you released it on the track? If the marble rolls off the track and onto the floor, record the distance as “off the track”.

2. Why do you think the marble stopped at this position?

3. Record data from your trials below:

	Height of Incline (cm)	Distance the Marble Traveled (cm)				Average Distance Marble Traveled (cm)
		Trial 1	Trial 2	Trial 3	Trial 4	
Incline 1						
Incline 2						

Incline 3						
Incline 4						
Incline 5						

4. Does the stopping point of the marble change as the height of the incline changes?

5. Does doubling the height of the incline make the marble go twice as far?

6. Explain any changes you observed in potential and kinetic energy?

7. Do hills or curves in your track cause the marble to stop at different positions? Do you think hills and curves should make any difference? Why or why not?

8. Draw the types of loops you put in your track. Under each one tell whether the marble made it all the way around the loop or fell to the ground.

9. What did you have to do to make the marble successfully complete the loop?
