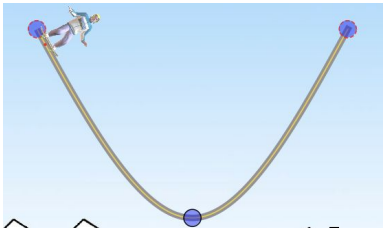


2.9 PhET Simulation

Use the [PhET Energy Skate Park Simulation](#) to answer the following questions

1. Click Pie Chart
2. Click Bar Graph
3. Press the “trash can” icon under thermal
4. Place your skater at the top of the track as seen below.
5. Start your skater at the top of the track.

- Fill out the table below:

Position of Skater	Result	Possible reasons why it happened.
		

Run your skater through the track again. Use this tool to help you label the spots on the ramp where there is the greatest **KE** and **PE**.

- Label your results on the diagram below (click on the image and then click “edit”).



- Look at the bar graph. What can you say about the relationship between **KE** and **PE**?

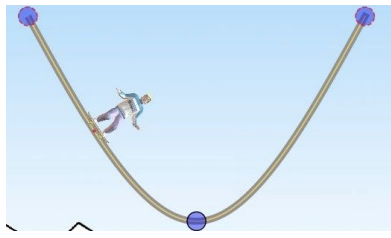
Write your response here...

Now drag and drop your skater halfway up the track (as seen in the picture below).

- Predict what you think will happen:

Write your response here...

- Fill out the table below:

Position of Skater	Result
	

- What is the relationship between the PE and the height of the skater on the track?

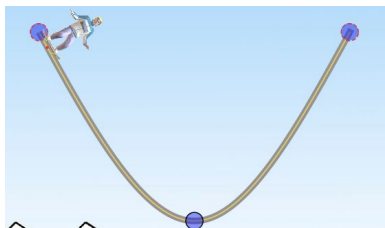
Write your response here...

Increase the mass of your skater

- Predict what you think will happen

Write your response here...

- Run the skater again and complete the table below:

Position of Skater	Result	Possible reasons why it happened.
		

- What do you notice about the bar graph, now, compared to when the mass was less?

Write your response here...