PhET Skateboard Simulation

Getting started:

1. Go to <https://phet.colorado.edu/sims/html/energy-skate-park-basics/latest/energy-skate-park-basics_en.html>

*(You can google PhET Skatebaord)*

2. After the simulation finishes loading, click on “Intro”

3. Before playing with the simulation, make sure to click on “Bar Graph”, “Speed”, and “Grid”

4. To start the simulation, place the skater near the top of the ramp.

After playing with the simulation, make sure you are able to answer the following questions:

(*Hint: If not are not sure why this happens, look at the factors that affect kinetic and potential energy*)

1. What happens to kinetic and potential energy when the skater moves downward? Why?

2. What happens to kinetic and potential energy when the skater moves upward? Why?

3. When or where does the skater have the greatest amount of kinetic energy? Why?

4. When or where does the skater have the greatest amount of potential energy? Why?

5. Based on the Law of Conservation of Energy, if you start the skater at a height of 4meters, how far up can the skater move up on the other of the ramp? Why?