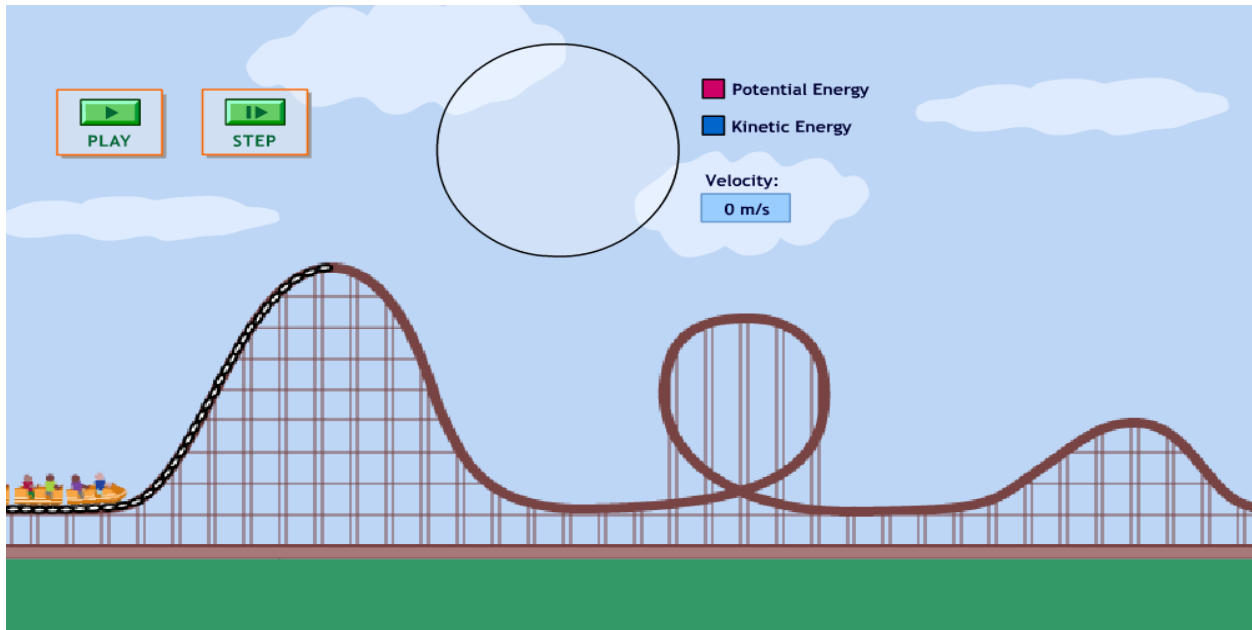


Kinetic vs. Potential Energy Online Roller Coaster Activity

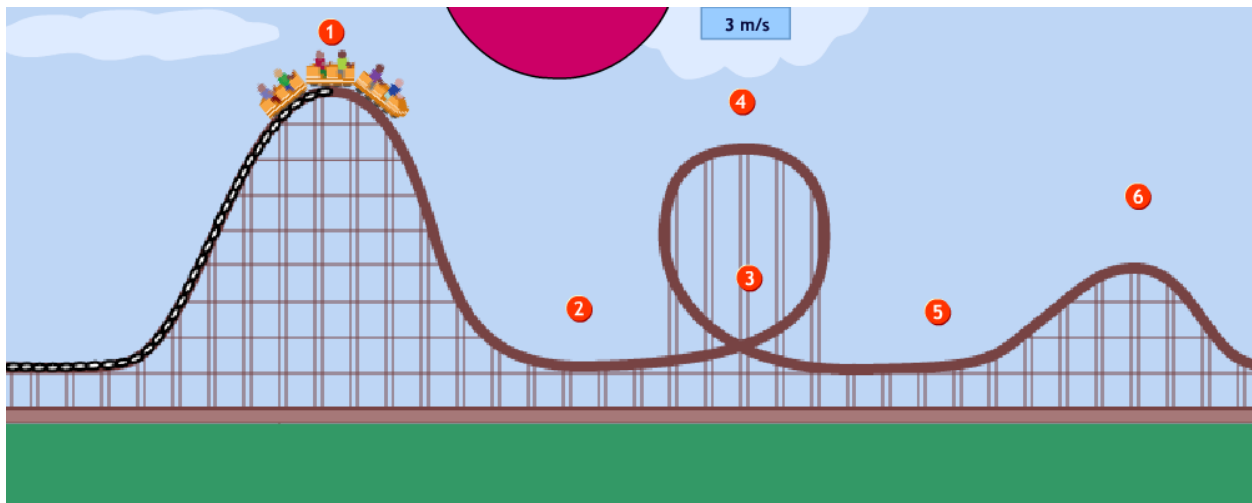
Essential Vocabulary:

Potential Energy: _____

Kinetic Energy: _____



1. Label where you think the roller coaster has kinetic energy and/or potential energy.



2. Hypothesize at which point the roller coaster would have the greatest kinetic energy? Explain your thinking.

3. Hypothesize at which point the roller coaster would have the greatest potential energy? Explain your thinking.

4. Using the website (at the bottom of this page), complete the following data table:

Step #	Which one is greater potential or kinetic?	Velocity
1		
2		
3		
4		
5		
6		

5. Was your hypothesis supported by the data collected for question 2? Why or why not?

6. Was your hypothesis supported by the data collected for question 3? Why or why not?

7. How do roller coasters demonstrate potential and kinetic energy?

8. When designing roller coasters, why does the height of the first hill have to exceed all other hills, loops, etc.?

<http://www.pbslearningmedia.org/resource/hew06.sci.phys.maf.rollercoaster/energy-in-a-roller-coaster-ride/>