
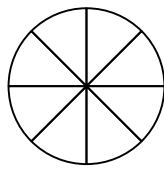

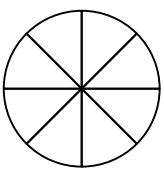

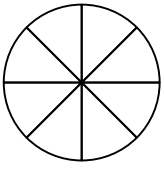

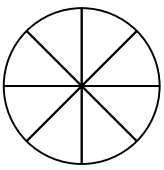

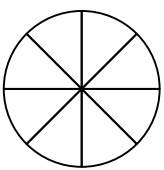


Name: _____ Period: _____ Date: _____

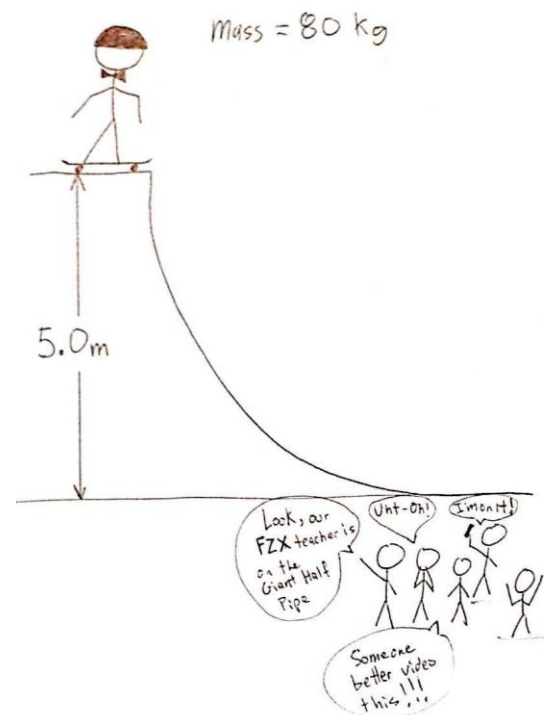
HS.P.E.38-45-46 Assessment

U_g = Gravitational Potential Energy U_s = Elastic Potential Energy **KE** = Kinetic Energy

HS.P.E.38	I can use words, diagrams, <u>pie charts</u> , and bar graphs to represent the way the type and total amount of energy in a system changes (or doesn't change).	
HS.P.E.46	I can identify multiple snapshots (states) to analyze the energy for a system in a given situation	

HS.P.E.46		HS.P.E.38
<p>In each box below, calculate the missing values for U_g, K.E., and Total Energy.</p>		<p>For each position of the diver, draw a pie chart that represents the amounts & types of energies at each position.</p>
<p>1</p> <p style="margin-left: 40px;">$U_g =$ <u>40,000 J</u></p> <p style="margin-left: 40px;">K.E. = <u>0 J</u></p> <p style="margin-left: 40px;">Total Energy = _____</p>		<p>■ = U_g □ = KE</p> <div style="text-align: center;">  </div>
<p>2</p> <p style="margin-left: 40px;">$U_g =$ _____</p> <p style="margin-left: 40px;">K.E. = <u>30,000 J</u></p> <p style="margin-left: 40px;">Total Energy = _____</p>		
<p>3</p> <p style="margin-left: 40px;">$U_g =$ <u>20,000 J</u></p> <p style="margin-left: 40px;">K.E. = _____</p> <p style="margin-left: 40px;">Total Energy = _____</p>		
<p>4</p> <p style="margin-left: 40px;">$U_g =$ _____</p> <p style="margin-left: 40px;">K.E. = <u>30,000 J</u></p> <p style="margin-left: 40px;">Total Energy = _____</p>		
<p>5</p> <p style="margin-left: 40px;">$U_g =$ <u>0 J</u></p> <p style="margin-left: 40px;">K.E. = _____</p> <p style="margin-left: 40px;">Total Energy = _____</p>		

SHOW ALL WORK & Use the diagram of a physics on a skateboard ramp answer the following questions:



- What is the U_g of the physics teacher at the top of the ramp?
- What is the KE of the physics teacher at the top of the ramp?
- What will be the U_g of the physics teacher when he gets to the **bottom** of the ramp?
- What will be the KE of the physics teacher when he gets to the **bottom** of the ramp?
- What will be the **velocity** of the physics teacher when he gets to the bottom of the ramp?