Name: _____ Date: _____ Class: ____

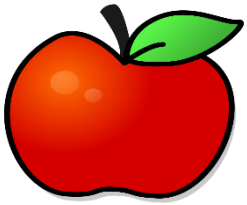
Review for PE and KE Test

Fill in the Blanks.

1. Energy is defined as the _____ to do _____ or cause _____.
2. The Law of Conservation of Energy states that energy cannot be _____ or _____. This means that the energy in a system remains _____. Therefore as PE increases, KE must _____ and as KE increases, PE must _____.
3. The SI unit for energy is _____( ).
4. PE is defined as _____ energy and KE is defined as energy that is in _____.
5. For objects that are falling PE_{max} is at the _____ point and KE_{max} is at the _____ point.
6. The energy in a closed system is found by _____ the PE and the KE.

Identify each of the following as Potential or Kinetic.

_____



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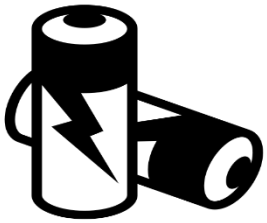
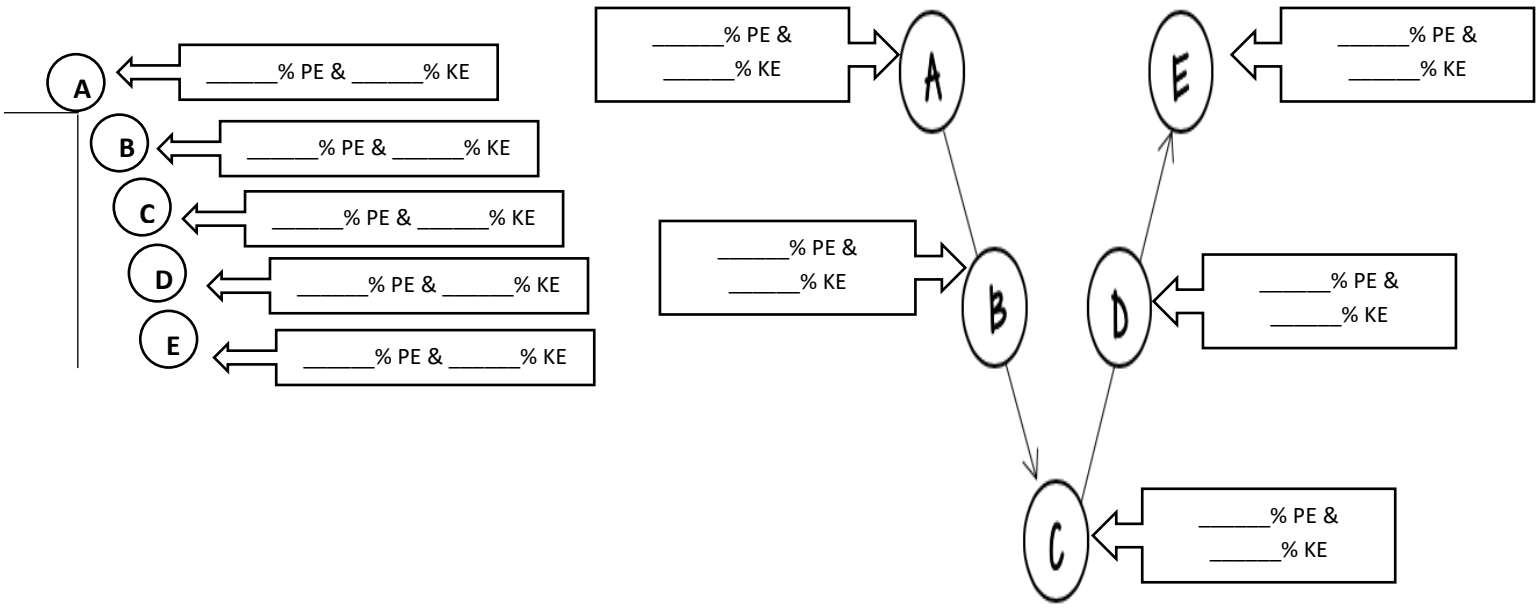


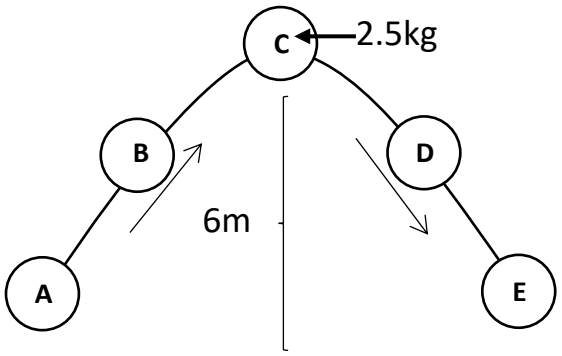
_____

Label the diagrams with % PE and KE at each Point.



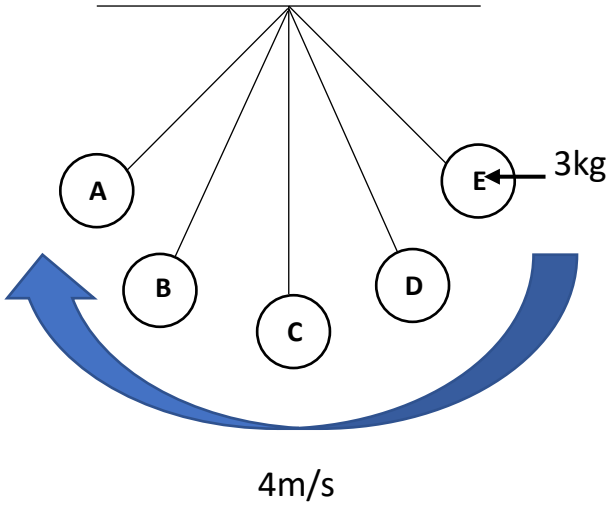
KE = ½ x m x v^2	PE = m x g x h	g = 9.8 m/s^2

Calculate the energy in each diagram. Use that information to fill in the energy chart.



Position	PE(J)	KE(J)	Total(J)
A			
B			
C			
D			
E			

Given (w/ Units):	Formula:	Substitution:	Answer (w/ Units):



Position	PE(J)	KE(J)	Total(J)
A			
B			
C			
D			
E			

Given (w/ Units):	Formula:	Substitution:	Answer (w/ Units):

Name: _____ Date: _____ Class: ____

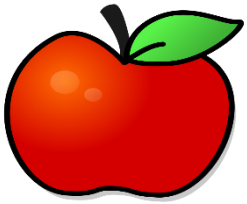
Review for PE and KE Test

Fill in the Blanks.

7. Energy is defined as the **ABILITY** to do **WORK** or cause **CHANGE**
8. The Law of Conservation of Energy states that energy cannot be **CREATED** or **DESTROYED** This means that the energy in a system remains **CONSTANT** Therefore as PE increases, KE must **DECREASE** and as KE increases, PE must **DECREASE**
9. The SI unit for energy is **JOULE (J)**.
10. PE is defined as **STORED** energy and KE is defined as energy that is in **MOTION**
11. For objects that are falling PE_{max} is at the **HIGHEST** point and KE_{max} is at the **LOWEST** point.
12. The energy in a closed system is found by **ADDING** the PE and the KE.

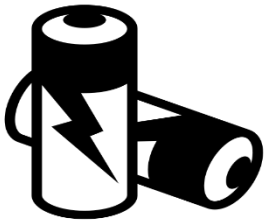
Identify each of the following as Potential or Kinetic.

MOTION



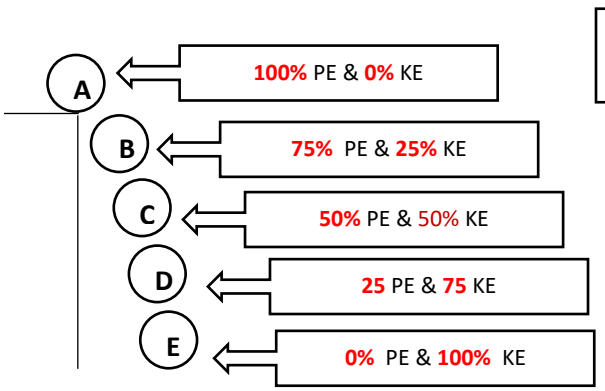
POTENTIAL

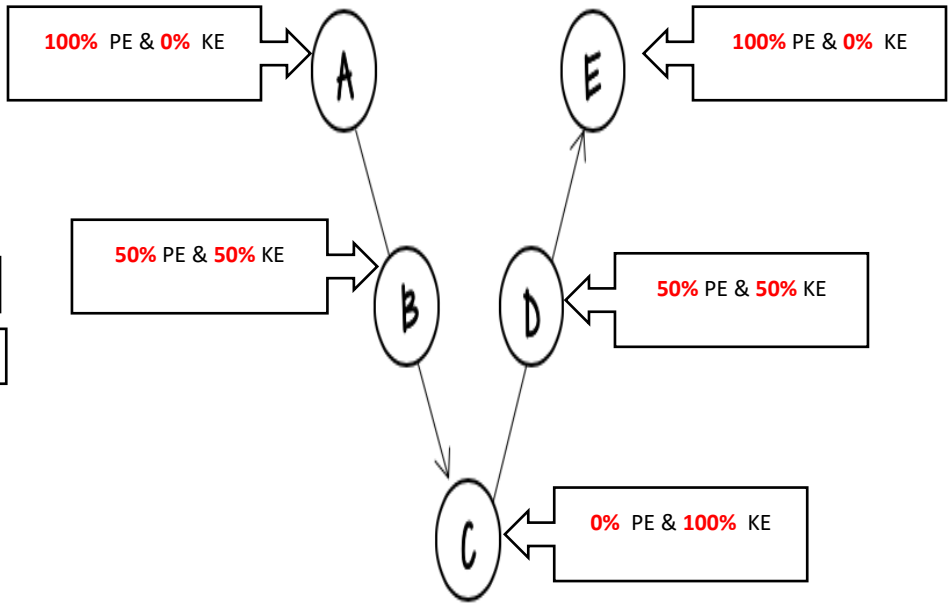
KINETIC



POTENTIAL

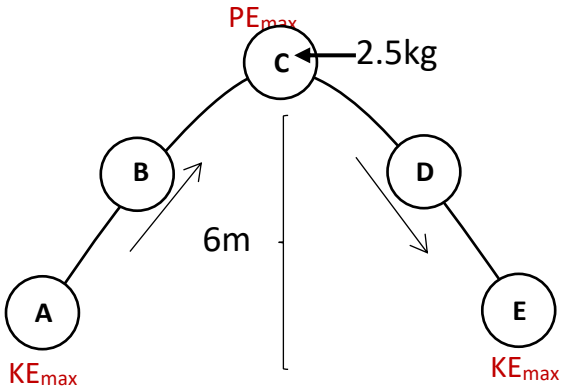
Label the diagrams with % PE and KE at each Point.





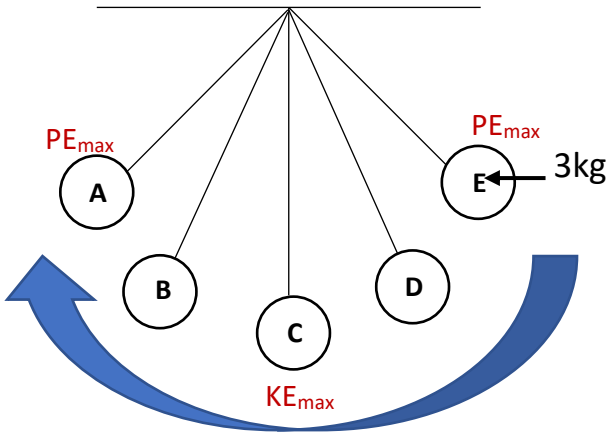
KE = ½ x m x v^2	PE = m x g x h	g = 9.8 m/s^2

Calculate the energy in each diagram. Use that information to fill in the energy chart.



Position	PE(J)	KE(J)	Total(J)
A	O J	147 J	147 J
B	73.5 J	73.5 J	147 J
C	147 J	O J	147 J
D	73.5 J	73.5 J	147 J
E	0J	147 J	147 J

Given (w/ Units):	Formula:	Substitution:	Answer (w/ Units):
m= 2.5**kg** g= **9.8 m/s²** h= 6**m**	**PE =** mgh	**PE =** (2.5)(9.8)(6)	**PE =** 147 J



4m/s

Position	PE(J)	KE(J)	Total(J)
A	24J	O J	24 J
B	12 J	12 J	24 J
C	O J	24J	24 J
D	12 J	12 J	24 J
E	24J	O J	24 J

Given (w/ Units):	Formula:	Substitution:	Answer (w/ Units):
M= 3**kg** V=**4m/s**	**KE = ½ mv²**	**KE = ½ (3)(4²)**	**KE = 24 J**