

Name: _____

Period: _____

Unit 3 Test Review

24

Fill out the Academic Vocabulary forms below. Identify where in the textbook these topics are located as well as the worksheets.

Word/Term: ENERGY		Drawing:
Rate my Understanding: 1 2 3 4		
Textbook Definition:		
Text Book/Worksheets Location	Describe in own words:	
Word/Term: WORK		Drawing:
Rate my Understanding: 1 2 3 4		
Textbook Definition:		
Text Book/Worksheets Location	Describe in own words:	
Word/Term: POWER		Drawing:
Rate my Understanding: 1 2 3 4		
Textbook Definition:		
Text Book/Worksheets Location	Describe in own words:	
Word/Term: FISSION		Drawing:
Rate my Understanding: 1 2 3 4		
Textbook Definition:		
Text Book/Worksheets Location	Describe in own words:	
Word/Term: FUSION		Drawing:
Rate my Understanding: 1 2 3 4		
Textbook Definition:		
Text Book/Worksheets Location	Describe in own words:	

1. Nuclear	A. Any Potential or Kinetic energy.
2. Thermal	B. Due to splitting or combining atoms.
3. Radiant	C. Held in molecular bonds.
4. Mechanical	D. Heat energy.
5. Chemical	E. Electromagnetic radiation (light energy).
6. Electrical	F. Moving electrons.

What Kind of Thermal Transfer? 1. Conduction; 2. Convection; 3. Radiation	
___ From a light bulb.	___ Putting your hand on a hot car.
___ Holding onto an ice cube.	___ A fan cooling you down.
___ Causes ocean currents.	___ If your hand is next to, but not touching a brick

What kind of Energy: E_p , E_k , Work, or None?

___ An object sitting on the edge of a table.

___ A bullet shot up into the air before it gets to the top.

___ A ball after it hits the ground and stops.

___ Pushing an object up a ramp.

___ After pushing an object up a ramp.

___ What a rock loses as it falls.

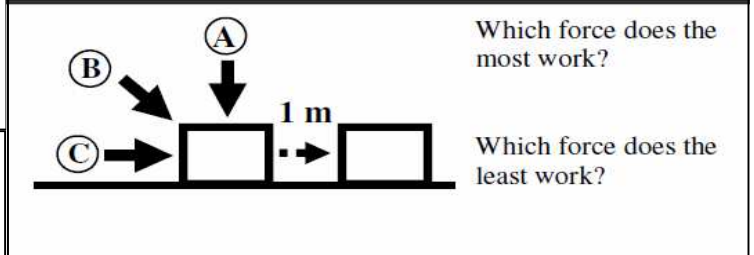
___ What it takes to stop or start an object.

___ How much energy an object loses if there is no friction.

True or False: "An object at rest has potential energy".

A 4 kg rock is held 2 m above the ground for 3 seconds. How much work was done?

A 8 kg cart is rolling 5 m/s. Calculate its kinetic energy.

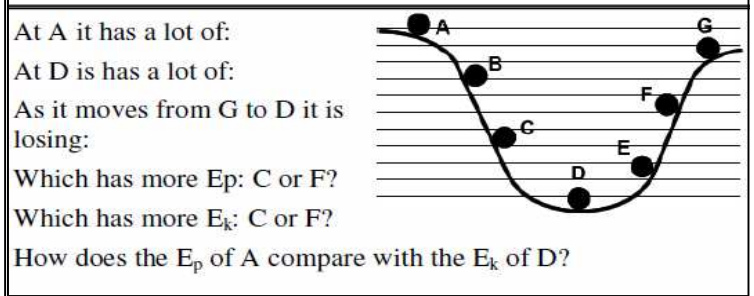


A rock is pushed 4 meters by a 10 N force.

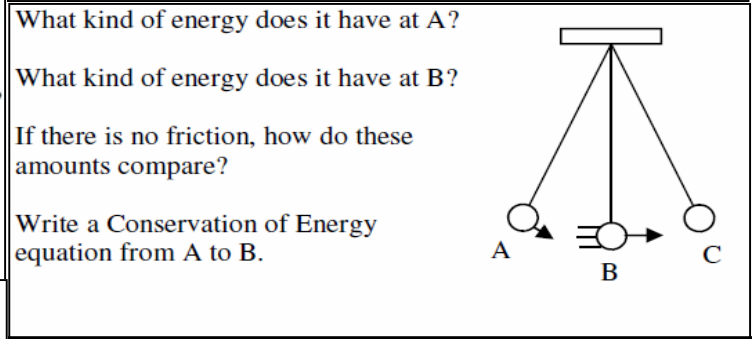
A) How much work was done?

B) If done in 5 seconds, how much power was used?

C) If it was pushed on a flat surface, what kind of energy did it gain?



A 2 kg rock on a 6 meter ledge has how much potential energy?

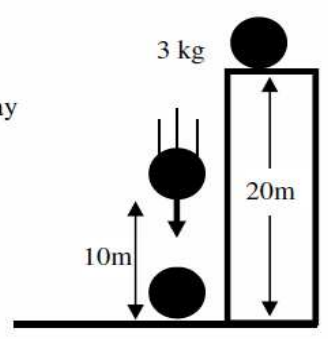


How much potential energy does the ball have at the top?

How much E_p does it have half-way down?

How much E_k does it have at the bottom just before it hits?

Find the velocity of the ball at the bottom.



Light bulb A uses 120 J of energy in 2 seconds. How powerful is the light bulb?

Light bulb B uses 120 J of energy in 12 seconds. How powerful is the light bulb?

Which light bulb used more energy?

Which light bulb is more powerful?

True or false? Something more powerful can do more work or use more energy.