Energy Web Quest Name_____

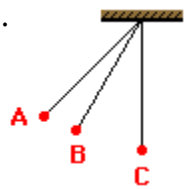
Go http://www.physicsclassroom.com/Class/energy/ and answer the following questions.

1. When is work done on an object?
2. What is potential energy?
3. What is gravitational PE and give the formula?
4. Before determining gravitational PE what must you do?
5. What is elastic potential energy? What is the formula?

Click on Kinetic Energy

6. What is kinetic energy?
7. What is the kinetic energy formula?
8. What will happen to your Kinetic energy if you triple your speed?

Click on Mechanical Energy

9. When work is done on an object, what does the object gain?
10. What is mechanical energy?
11. What does it mean when energy is conserved?
12. 

Which point has the greatest potential energy?_____
Which point has the greatest Kinetic energy?_____
How much KE & PE at point B? _____

http://www.classzone.com/books/ml_science_physical/page_build.cfm?id=resour_ch4&u=1

Use the link above. On the right side, under the "green" box labeled "simulations" click on the kinetic energy link:

1. Which two factors affect the average kinetic energy of the particles of any type of matter?
2. What happens to the speed of the particles if the temperature is increased?
3. Click the "Next" button so you can change the mass of the particles. What happens to the speed of the particles if the size of the particle is increased?

http://www.energyeducation.tx.gov/energy/section_1/topics/law_of_conservation/

1. State what the “Law of Conservation of Energy” means.

2. What happens to energy not used to do work?

3. Give an example.

http://www.energyeducation.tx.gov/energy/section_1/topics/forms_of_energy/index.html

Name & define the 6 forms of energy.

1.

2.

3.

4.

5.

6.

Explain what an “energy conversion or transformation” means.

http://www.learner.org/interactives/parkphysics/coaster/section1.html

Build a working roller coaster.

1. What was your “fun” rating?

2. What was your safety rating?

3. What seems to be necessary, or needed, to make a roller coaster complete its circuit?