GCS Grade 7 Science Unit F CFA Energy Conservation and Transfer Study Guide

1. What is true of the energy produced in a burning log?
2. What happens to the electrical energy used to light a light bulb?
3. What energy conversion process occurs whenever coal is burned?
4. In which situation would an object have the most kinetic energy?
5. In which situation would a person have high potential energy but little to no kinetic energy?
6. What happens to the chemical energy stored in a battery when used to power a laptop?
7. In which situation would an object have the highest level of mechanical energy?
8. Energy that is doing work is called …………..
9. Energy that is stored is called ……………..
10. Light is an example of ……………..
11. When riding a roller coaster, you go up and down many hills. When do you have the maximum potential energy?
12. Which forms of energy increase as a rocket blasts off?
13. What will happen to the gravitational potential energy of a rock as it moves down a hill during a landslide?
14. At the top of its swing, a pendulum has zero kinetic energy. How much potential energy does it have at the bottom of its swing?



1. A mountain climber starts at the base of a mountain, climbs all the way to the peak, and then climbs back down to the base of the mountain. At which point is the climber's gravitational potential energy the greatest?
2. A yoyo does not continue to go up and down forever. If energy is not destroyed, what causes the yoyo to stop?
3. A falling rock has kinetic energy. Where does that kinetic energy go when it hits the ground and stops?
4. The law of \_\_\_\_\_\_\_\_ states that energy cannot be created or destroyed, but only changed from one form to another.
5. A cup of hot tea has a lot of kinetic energy. Where does that kinetic energy go as the tea cools?
6. What happens the sun’s energy in this diagram?

