Study Guide for Energy and Simple Machines

* Define energy
* Know the units for measuring energy
* What to variables effect the amount of kinetic energy?
* Define mechanical energy
* Know examples of things that store chemical energy
* Know examples of energy conversions (chemical 🡪 thermal, thermal 🡪 mechanical, mechanical 🡪electromagnetic, electromagnetic 🡪 chemical)
* Name a few examples of fossil fuels
* Where does the energy for fossil fuels originally come from?
* Describe and give examples of kinetic energy
* Describe and give examples of potential energy
* Define power
* How do you calculate an object’s mechanical energy?
* Know how to calculate work given force and distance.
* What unit is work measured in?
* How does a pulley change the force exerted to be more efficient?
* How do you calculate mechanical advantage?
* Name the six simple machines
* What are some examples of compound machines?
* Which of your body parts are wedges?
* Which parts of your body are levers?
* Why would a lever only have 50% efficiency?
* Given a diagram (think of the bounce activity), know where the object has the most potential and kinetic energy.
* Given a diagram of levers, know the difference between the three classes of levers and examples of each class.