Energy

Energy is the ability to do __work__________.

Mechanical Energy Example: ___car, bike and roller coaster_____________

Chemical Energy Example: __batteries ____________.

Electrical Energy Example: ___electricity______________

Sound Energy Example: ___vocal cords, speakers, instruments____________

Light Energy Example: __Sun, light bulbs___________________

Nuclear Energy Example: ___splitting atom________________

The Law of Conservation of Energy – energy can neither be created_ nor __destroyed__________, but it can be transformed.

Energy is measured in ___Joules____________________

Work

Work is measured in either _Newtons·meters___ or ___Joules__________.

The formula for work is \( W = \text{force} \cdot \text{distance} \)____

In order for work to be accomplished, an object must _move_ in the direction the _force_ is applied. The amount of work doesn’t __change_____ with the amount of time the job takes.

Power

Power is the rate at which _work__ is done.

The formula for power is \( P = \frac{\text{work}}{\text{time}} \)____

The SI unit for Power is the __Watt_________.