Mechanical Advantage Notes

Machines make work easier by:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is how much more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_you can get out of a simple machine. The main advantage of using a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is to multiply your force so you can do more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with less \_\_\_\_\_\_\_\_\_\_\_\_.

Two Types of Work:

* Work \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the amount of work done \_\_\_\_\_\_\_\_\_\_ a machine.
* Work \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the amount of work done \_\_\_\_\_\_\_\_\_\_\_ a machine.

Remember….

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is what the MACHINE does

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is what YOU do

Formula: Mechanical Advantage = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For example: if you put in 10 Newtons of force into a machine and it puts out 80 Newtons of work your mechanical advantage:

* Mechanical Advantage \_\_\_\_\_\_\_\_\_\_\_\_\_
  + There is no advantage to using the machine
* Mechanical Advantage \_\_\_\_\_\_\_\_\_\_\_\_\_
  + The machine makes work easier
* Mechanical Advantage \_\_\_\_\_\_\_\_\_\_\_\_\_
  + The machine makes work harder