Physics 11

**Section 7.6: Efficiency**

If power is how \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ you are…  
  
Then efficiency is how \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ you are.

When a machine (or a human) does work, the efficiency depends on…

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and

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**Example:** A student raises a 60 kg box 3 m by pushing it up a ramp. The ramp makes a 15o angle with the horizontal and the student pushes with a force of 500 N. What is the efficiency of the ramp?

**Example:** A 500 W motor lifts a 20 kg object 5 m in 3.5 s. What is the efficiency of the motor?