

LOS: Work, Power

pg. 69

Working Hard?
(or hardly working?)

Focus Question

Today's Date

What are we really doing when we say that we are "working?"

Evidence: Cornell Notes - Blue Book (pgs 188 - 197)

What does it mean to "do Work?" (p. 188)

I think work is...

WORK -

Is This Work?
Examples

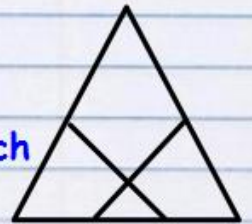
1. Girl walking with purse: _____
2. Girl picking up purse: _____
3. 2 men moving a sofa: _____
4. A baby pushing a toy: _____
5. Pushing a wall for 3 min: _____

How to Calculate Work: (p.190):

$$\text{WORK} = \text{force} \times \text{distance}$$

$$W = F \times d$$

*Work is measured in N•m, which is simply called joules (J)



Work Unit = _____

Work Examples
1-2 (p.190, side):

- 1.
- 2a.
- 2b.

BrainPOP Video
"WORK"

4	5	6	7
8	9	Quiz Score	

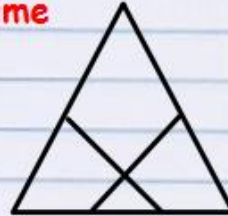
Show your work for problems 4-9

Do You Know
What POWER Is?
(p.191)

-power is _____.

-formula for power is: work/time

$$P = \frac{W}{t}$$



POWER Unit = _____

-unit to measure POWER is
joules/sec, or simply called watts(W)

BrainPOP Video
"POWER"

4	5	6	7
8	9	10	Quiz Score

Show your work for problems 4-10.

What is a Machine
(again)? (p.192)

*work input is: _____

*work output is: _____

-using a machine DOES NOT mean doing less
work!

Explain the Force-
Distance Tradeoff:
(p.194)

Work Output is _____ greater than Work
Input. Machines just use _____ FORCE
spread out over a _____ distance.

Summary: