Name_____ Date_____
Period_____ Number____

Work

Directions: Determine how much work is done. REMEMBER: Work = force x distance

Calculate how much work is done in each of the following examples. Show all of your calculations and remember your unit! (joules)

1. A child uses 4N of force to pull a wagon a distance of 2m along a sidewalk.

2. A construction worker uses 30N of force to drag a toolbox a distance of 3m.

3. Michelle pushes her ice cream cart with a force of 10N for a distance of 8m.

4. Sarah lifts some of the *Number the Stars books* with a force of 20N for a distance of 2m.

5. Anthony drags the rest of the *Number the Stars* books with a force of 15N for a distance of 4m.

Name _____ Date_____ Period_____

Answer the following questions using complete sentences.

1) **What is work?**

_____

_____

_____

_____

2) **How do you know when work is being done on an object?**

_____

_____

_____

_____

3) **What is the formula for work?** _____

4) **What is the unit for work?** _____

5) **How does a machine make work easier?**

_____

_____

_____

_____

6) **Why are machines not 100% efficient?**

_____

_____

_____

_____