What Is Work? *(continued)*

2. Complete the following table by classifying each example as either work or no work.

Work	
Example	**Work or No Work?**
You pull your books out of your book bag.	
You lift a bin of newspapers.	
You push on a car stuck in the snow.	
You hold a heavy piece of wood in place.	
You pull a sled through the snow.	
You hold a bag of groceries.	

3. In order for you to do work on an object, the object must move some _____ as a result of your force.

4. Explain why you don't do any work when you carry an object at a constant velocity.

5. When you pull a suitcase with wheels, why does only part of your force do work?

Calculating Work

6. The amount of work you do depends on both the amount of _____ you exert and the _____ the object moves.

7. Is the following sentence true or false? Lifting a heavier object demands greater force than lifting a lighter object. _____

8. What formula do you use to determine the amount of work done on an object?

9. What is the SI unit of work? _____

10. What is the amount of work you do when you exert a force of 1 newton to move an object a distance of 1 meter? _____

Power

11. What is power?

12. Is the following sentence true or false? You have greater power when you run up a flight of stairs than when you walk up the stairs.

13. What is the formula you use to calculate power?

14. Rewrite the equation for power in a way that shows what work equals.