Name: _____

Period:_____

HW Unit 7:1 — Guided Reading
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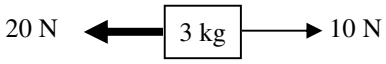
Assigned: Wed., 1/24 and Thurs., 1/25
Due: Fri., 1/26 and Mon., 1/29

Start on page 262 (Forces)

1. How do you change an object's velocity?
2. What is a net force?
3. If an object feels a net force to the right, which way will the object accelerate?
4. (Not from the book) For an object to accelerate it must change _____ or _____.
5. So, a net force will cause an object to change _____ or _____.
6. Why doesn't the first rope in the tug-of-war move?
7. Which direction does the second tug-of-war example move?
8. Why?
9. (Not from book) So, does direction matter with forces?
10. (Not from book) So, that means that force is a _____.
11. Given the following object, which way will it accelerate?



12. Why?

HW Unit7:1

Use your "How to Solve Word Problems" notes: (Show work)

13. A 10 kg object accelerates to the right at 3 m/s^2. Find the force that caused this.
14. The same 10 kg object accelerates to the right at 5 m/s^2. Find the force.
15. In which problem was there a bigger mass?
16. In which problem was there a bigger force?
17. So, a bigger force causes more or less acceleration?
18. A 12 N force pulls on a 4 kg object. How much acceleration does it have?
19. A 12 N force pulls on the same 6 kg object. How much acceleration does it feel?
20. In which problem was there a bigger mass?
21. In which problem was there a bigger force?
22. In which problem was there a bigger acceleration?
23. So, with the same force, a bigger mass has less or more acceleration?