

**DESCRIBING FORCES**

Use the resources on Mr. Hanna's website to complete the following assignment.

**VOCABULARY:**

- 1) FORCE -
- 2) NET FORCE -
- 3) UNBALANCED FORCES –
- 4) BALANCED FORCES –
- 5) APPLIED FORCE –
- 6) GRAVITY –
- 7) NORMAL FORCE –
- 8) FRICTION –

**SHORT ANSWER:**

- 9) How are forces described (two pieces of information)?
  
- 10) Compare contact forces with non-contact forces and give examples of each.
  
- 11) How do balanced forces affect motion? How do unbalanced forces affect motion?
  
- 12) Which objects exert a gravitational force on the objects around them?
  
- 13) What two variables affect the strength of the gravitational force between two objects?
  
- 14) If gravity is pulling down on you now as you are sitting on your seat, why aren't you falling down? (include the concepts of balanced/unbalanced forces in your answer)
  
- 15) What two variables affect the friction force between two objects?
  
- 16) Which direction does the friction force act compared to the motion of the object?

PRACTICE:

17) Draw a force diagram of a box resting on the floor.

18) Draw a force diagram of the same box being slid across the floor at a constant speed.

19) Are the forces balanced or unbalanced in #17 and #18 above? How can you tell?

20) What would happen to the box in #18 if it was not experiencing balanced forces (if the applied force pushing it forward was stronger than the friction force)?