1. Describe what is meant by the word "motion" in Newton's 1st Law. Look to the online (www.mrwaynesclass.com/Newton/home.html -it is case sensitive) notes for a clue if you don't know the answer.)

2. How is being at rest also considered moving, "at a constant," velocity?

3. What does the formula "F=ma" imply about motion besides "Force equals mass times acceleration?"

4. What does "For every action there is an equal and opposite reaction" imply about forces?

5. How does rotational inertia represent both of these statements at the same time? "An object at rest will remain at rest, and an object in motion will remaining motion, …"

6. Write Newton's 2nd Law of motion

7. Write Newton's 3rd Laws of motion

8. Why is "inertia" not a source for a force?

9. In one of the class demonstrations, the dishes were pulled out from underneath a setting of dishes. This was used to demonstrate Newton's 1st law of motion. How can the 2nd and 3rd laws also be demonstrated/explained using this demonstration?

10. In the following part of a word problem, how can to tell which number is the pushing force and which is the weight of the bike? "A 200 N propels a 400N bicycle from rest to 10 m/s…"

11. How do you convert from Newton's t kilograms?

12. What force accelerates a 0.010 kg bullet from a rest to a speed of 1100 m/s in a distance of 1 meter?

13. During the 1970's the United States sent men to the Moon aboard a rocket called the Saturn V. This huge rocket was as tall as a football field is long. It's mass is 3,038,500 kg. If this rocket accelerated from rest at 5 g's, How much force was used to lift it off the ground?

14. A 9900 N small car is moved by a 650N force. If the car starts from rest, then how fast is it traveling after 111 m?

15. A 100 kg football player is traveling at 11 m/s when he is stopped in 0.1 seconds. What was the magnitude of the force that stopped the player?