Force and Newton's Law

Newton's First Law (pg 36 - 41)

1. Describe the term "force".

2. What is a net force.

3. Define balanced force.

4. Define unbalanced force.

5. State Newton's first law of motion.

6. What is friction?

7. Describe static friction, sliding friction, and rolling friction.

8. What do all forms of friction have in common?

9. What are different factors that cause static friction between two objects to increase.

Newton's Second Law (pg 42 - 48)

10. State Newton's second law of motion

11. Write Newton's Second Law Equation.

12. How is force measured?

13. What is gravity?

14. What is needed for there to be gravity?

15. Define weight?

16. How is weight calculated on earth?

17. How are weight and mass different?

18. What are two ways an object can accelerate?

19. State the formula to calculate acceleration.

20. Describe how satellites are placed in motion.

21. Explain how the force of air resistance depends on an object's speed.

22. Define center of mass.

Newton's Third law (pg 49 - 52)

23. State Newton's Third Law.

24. What is an action-reaction force pair.

25. Describe the action and reaction forces when a hammer hits a nail.