

Chapter 14 – Forces

Section 14.1 – Newton's First & Third Laws

<u>Vocabulary</u>	<u>Definition</u>
1. Force	1.
2. Newton's 1 st Law	2.
3. Inertia	3.
4. Unbalanced Forces	4.
5. Newton's 3 rd Law	5.
6. Acceleration	6.
7. Newton's 2 nd Law	7.
8. Newton's Law of Universal Gravitation	8.

1. Which has more inertia – a shopping cart full of groceries or an empty shopping cart? Why? (289)

(Illustrate/Sketch/Color the picture in the middle of page 294)

(Illustrate/Sketch/Color Figure 14.12 page 298)

Calculating Acceleration

Acceleration = _____

(Illustrate/Sketch/Color Figure 14.13 page 299)

Force, Mass, and Acceleration

Newton's Second Law = _____

Answer the following questions in complete sentences.

1. In Physics, 'hit the ball" means that a golf club does what? (288)

2. Motion can change only through the action of a _____. (288)

3. How are forces created? (288)

4. Assume you are on a level golf course with no friction. How far will a hit ball travel? How can you stop it? (289)

5. Newton's first law is sometimes called the Law of _____. (289)
6. What does "net force" mean? (290)
7. Forces always come in _____. (291)
8. Two football players who have different weights collide on a field, resulting in a change of motion. Are their changes in motion the same or different? Why is this? (294)
9. What is the difference between positive and negative acceleration? (298)
10. What is weight dependent upon? (301)

(Fill in the table below to match Figure 14.14 page 300)

Useif you want to find...	...and you know...

Earn 5 points EXTRA CREDIT – Page 307 #1-10

(Write out each of the questions on a separate sheet of paper and answer them correctly)

