

Textbook Activity Guide (TAG)

Newton's Laws of Motion: pages 44-50

Name _____

Complete the following TAG activity with your group or learning partner using the following strategy codes below:

P= Discuss with a partner/group

WR= Write a written response on your own

PP= Predict with a partner

Map= Complete a visual aid to represent the information

Skim= Read quickly for a stated purpose, discuss with your partner

***Skim, WR** Find Newton's Laws of Motion and write them below.

1) _____

2) _____

3) _____

***SKIM,WR** Newton's 1st Law is often called the law of Inertia. Skim the section on inertia and write the definition of Inertia. Using this definition, explain why you will jerk forward in a car if someone slams on the brakes.

INERTIA- _____

WR, SKIM Why is it easier for you to throw a baseball than a bowling ball?

***SKIM, P** If objects in motion should stay in motion, why is it that when you throw a ball forwards, it will eventually fall down and roll to a stop on the ground?

Map, PP Imagine you're in space and you push an object forwards. Make a diagram showing the object's motion if it went past a planet (HINT: Gravity will pull on the object a bit).

SKIM Find the section on Newton's Second Law. What are the two things that the Acceleration of an object depends on?

1. _____ 2. _____

PP Which of the following would accelerate more: A large object being pushed by a small force, or a small object being pushed by a large force?

SKIM, WR When a ball is dropped, gravity from the ball pulls on earth, and earth's gravity pulls the ball. Why don't we see the effects of the ball pulling on the earth?

SKIM, P, MAP Skim the section on Newton's Third Law (Action-Reaction Forces). Try drawing the Reaction forces on the car below (HINT: 2 force pairs. Remember gravity, and the wheels!).

