

Directions: Go to the following website: www.physicsclassroom.com

- on left, click on *Physics Tutorial*
- click on *Newton's Laws*
- Lesson 4 : *Newton's Third Law of Motion*

Click on

a. *Newton's Third Law*

Read & then answer the questions 1-4 in the Check Your Understanding section

1. Which of the two forces is greater: the force on the firefly or the force on the bus? explain

2.
 - a. ... space is void of air so the rockets have nothing to push off of.
 - b. ... gravity is absent in space.
 - c. ... space is void of air and so there is no air resistance in space.
 - d. ... nonsense! Rockets do accelerate in space and have been able to do so for a long time.

3.
 - a. greater than the acceleration of the bullet.
 - b. smaller than the acceleration of the bullet.
 - c. the same size as the acceleration of the bullet.

4.
 - a. with more force when the rope is attached to the wall.
 - b. with more force when the rope is attached to the elephant.
 - c. the same force in each case

Now choose Next Section: *Identifying Action and Reaction Force Pairs*

a. Identifying Action and Reaction Force Pairs

Read and then identify the action/reaction pairs for each.

1. Catcher glove and ball-

2. Bowling ball and Pin-

3. Balloon-

4. Two feet-

5. Tractor and Elephant-

Application: Give three examples of Newton's Third Law in your own life and explain what the action and what is reaction.