

Forces ▪ *Reading/Notetaking Guide***The Nature of Force** (pp. 374–377)

This section explains how balanced and unbalanced forces are related to motion.

Use Target Reading Skills

As you read, fill in the notetaking graphic organizer. Under “Notes,” write key ideas, using phrases and abbreviations. Include a few important details. Use your notes to write a summary statement for each red heading. Under “Recall Clues and Questions,” write study questions that your notes help you answer. Two questions are provided. You may include others.

The Nature of Force

Recall Clues and Questions	Notes
What is a force?	
What is net force?	

Forces ▪ *Reading/Notetaking Guide*

What Is a Force? (pp. 374–375)

1. In science, a force is _____.
2. When one object pushes or pulls another object, the first object is _____ a force on the second object.
3. Circle the letters of the two ways that forces are described.
 - a. direction
 - b. velocity
 - c. strength
 - d. acceleration
4. The SI unit used to measure the strength of a force is the _____.

Combining Forces (pp. 375–377)

5. The overall force on an object after all the forces are added together is called the _____.
6. When two forces act in the same direction, they are _____ together.
7. Adding a force acting in one direction to a force acting in the opposite direction is the same as adding a(n) _____ number and a(n) _____ number.
8. Unbalanced forces can cause an object to change its motion in three ways. What are they?

9. Is the following sentence true or false? Unbalanced forces acting on an object will change the object's velocity. _____
10. Equal forces acting on one object in opposite directions are called _____.
11. Is the following sentence true or false? Balanced forces acting on an object will change the object's velocity. _____
12. When you add equal forces exerted in opposite directions, there is no _____.