

Motion and Energy ▪ *Reading/Notetaking Guide*

Describing Motion (pp. 338–341)

This section explains how to recognize when an object is in motion.

Use Target Reading Skills

After you read this section, reread the paragraphs that contain definitions of Key Terms. Use all the information you have learned to write a definition of each Key Term in your own words. Be sure your definition could be used to explain the term to someone who has not read the section.

motion

reference point

distance

displacement

vector

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Motion (pp. 339–340)

1. An object is in _____ when its distance from another object is changing.
2. What is a reference point?

3. An object is in motion if it changes position relative to a(n) _____.

Use the figure below to answer questions 4–6.



4. Suppose you are standing on the sidewalk. Describe your motion relative to the car and the plane.

5. Suppose you are riding in the car. Describe your motion relative to the person standing on the sidewalk and the plane.

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Describing Motion *(continued)*

6. Suppose you are riding in the plane. Describe your motion relative to the person standing on the sidewalk and the car.

Distance and Displacement (pp. 340–341)

7. An object's _____ is the length and the direction that the object has moved from its starting point.
8. Circle the letter of each sentence that is true about distance.
- a. It is the length and direction that an object has moved from its starting point.
 - b. It is a vector.
 - c. It is the length of the path between two points.
 - d. It is a quantity that consists of both a magnitude and a direction.
9. What can be shown graphically by using an arrow?
