

Name \_\_\_\_\_ Period \_\_\_\_\_

# HW #3

## 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**

\_\_\_\_\_

#### Motion (pp. 339–340)

1. An object is in \_\_\_\_\_ when its distance from another object is changing.

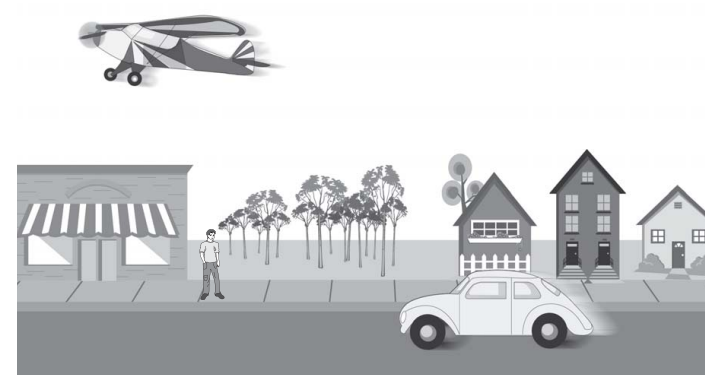
2. What is a reference point?

\_\_\_\_\_

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.

\_\_\_\_\_

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?

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