Name _____ Class_____Date_____

Skills Worksheet

Section Review

Measuring Motion

USING KEY TERMS

1. In your own words, write definitions for each of the following terms: *motion* and *acceleration*.

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2. Use each of the following terms in a separate sentence: *speed* and *velocity*.

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UNDERSTANDING KEY IDEAS

_____ 3. Which of the following is NOT an example of acceleration?
   a. a person jogging at 3 m/s along a winding path
   b. a car stopping at a stop sign
   c. a cheetah running 27 m/s east
   d. a plane taking off

_____ 4. Which of the following would be a good reference point to describe the motion of a dog?
   a. the ground
   b. another dog running
   c. a tree
   d. All of the above

5. Explain the difference between speed and velocity.

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6. What two things must you know to determine speed?

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7. How are velocity and acceleration related?

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MATH SKILLS

8. Find the average speed of a person who swims 105 m in 70 s. Show your work below.

9. What is the average acceleration of a subway train that speeds up from 9.6 m/s to 12 m/s in 0.8 s on a straight section of track? Show your work below.

CRITICAL THINKING

10. **Applying Concepts** Why is it more helpful to know a tornado's velocity rather than its speed?

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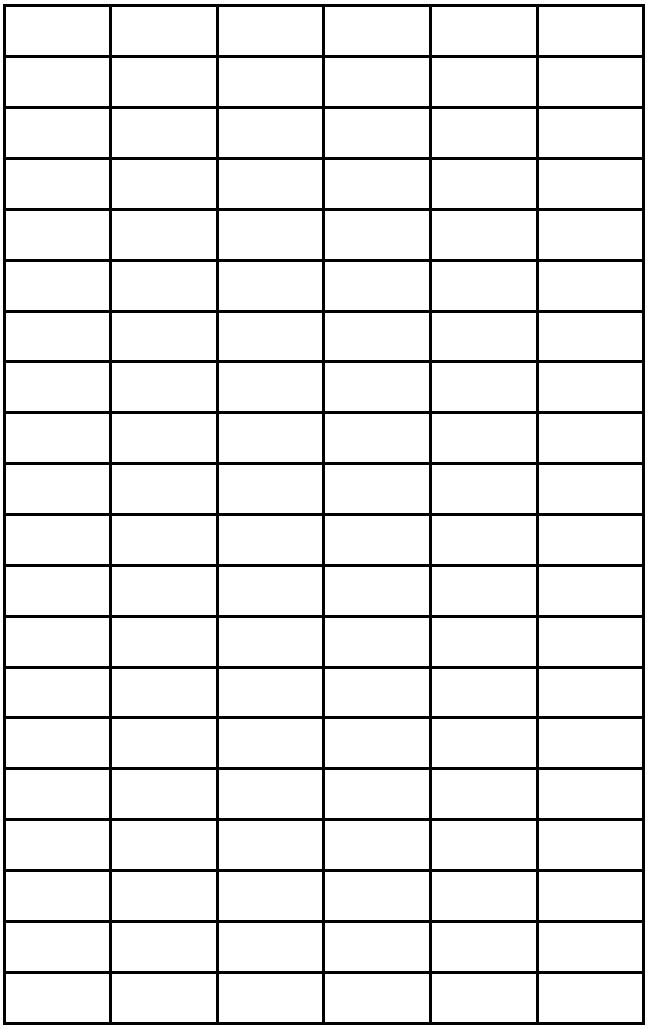
Section Review *continued*

11. **Evaluating Data** A wolf is chasing a rabbit. Graph the wolf's motion using the following data: 15 m/s at 0 s, 10 m/s at 1 s, 5 m/s at 2 s, 2.5 m/s at 3 s, 1 m/s at 4 s, and 0 m/s at 5 s. What does the graph tell you?



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