

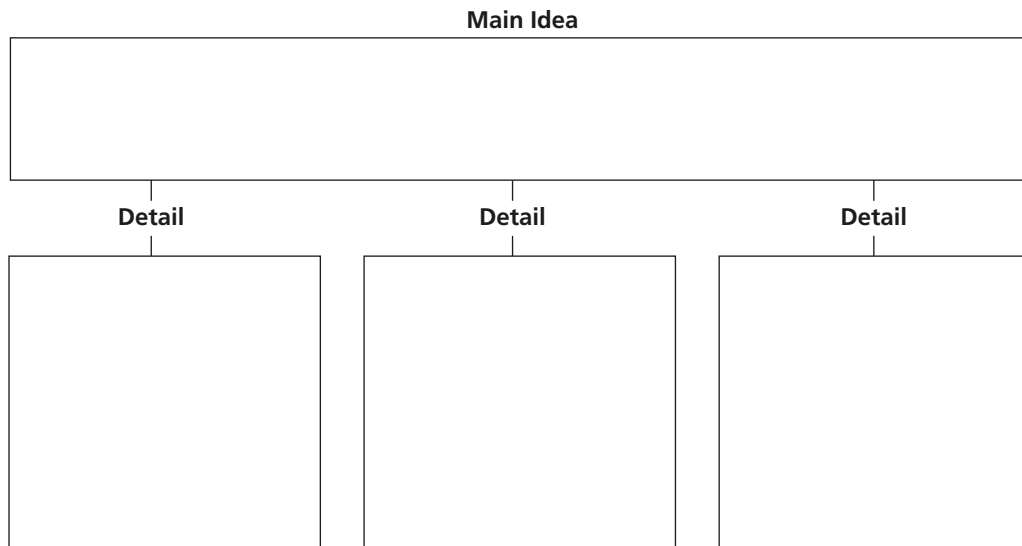
**Motion and Energy** ▪ *Reading/Notetaking Guide*

**Speed and Velocity** (pp. 342–347)

*This section describes the movement of an object in terms of speed and velocity. It also shows how to graph an object’s motion.*

**Use Target Reading Skills**

*Locate the main idea of the text under the heading “Velocity” on pages 344–345. It is the boldfaced sentence. Write the main idea in the graphic organizer below. Then look for details and examples that support the main idea. Write these supporting details in the lower portion of the graphic organizer.*



**Calculating Speed** (pp. 342–343)

1. What is the formula used to calculate the speed of an object?  
\_\_\_\_\_
2. How would you find the average speed of a cyclist throughout an entire race?  
\_\_\_\_\_  
\_\_\_\_\_

**Velocity** (pp. 344–345)

3. Speed in a given direction is called \_\_\_\_\_.
4. An approaching storm is moving at 15 km/hr. What do you need to know to determine its velocity?  
\_\_\_\_\_  
\_\_\_\_\_

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**Graphing Speed** (pp. 346–347)

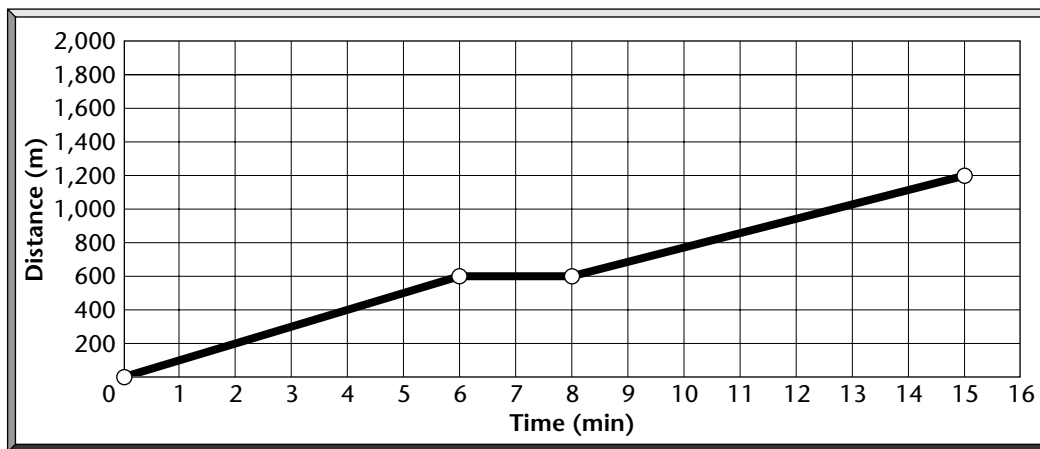
- 5. The slant of a line on a graph is called its \_\_\_\_\_.
- 6. Is the following sentence true or false? The steepness of a graph's slope for distance versus time depends on how quickly or slowly the object is moving. \_\_\_\_\_



- 7. The distance-versus-time graph above shows the motion of a jogger. How far did the jogger run in 15 minutes? \_\_\_\_\_

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**Speed and Velocity** *(continued)*



8. The distance-versus-time graph above also shows the motion of a jogger. The line is divided into segments. The middle segment is horizontal. What does that tell you about the jogger's progress between minute 6 and minute 8?

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