Name Date Class

Directed Reading for Content Mastery

Section 1 ▪ Describing Motion

Directions: *For each of the following, write the letter of the term or phrase that best completes the sentence.*

_____ **1.** A sprinter runs 200 m west and 100 m east. Her displacement is _____.
a. 300 m **b.** 100 m west

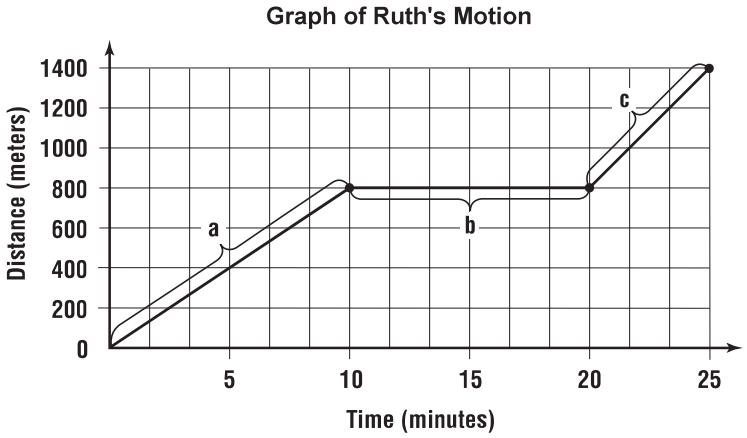
_____ **2.** Speed can be calculated by dividing distance by _____.
a. time **b.** displacement

_____ **3.** The speed of a motorcycle at a particular moment is its _____ speed.
a. average **b.** instantaneous

_____ **4.** Earth's plates move only a few _____ per year.
a. centimeters **b.** meters

_____ **5.** Two cars are each traveling at 72 km/h. One car is traveling northeast, and the other is traveling south. The two cars have different _____ .
a. velocities **b.** speeds

Directions: *Look at the graph. Match the letters in the graph to the sentences below.*



_____ **6.** Ruth stops for 10 minutes to speak to a friend.

_____ **7.** She walks at a constant speed of 80 m/min.

_____ **8.** She jogs 600 m in 5 minutes.

Meeting Individual Needs

Directed Reading for Content Mastery

Section 2 ■ Acceleration
Section 3 ■ Motion and Forces

Directions: *Complete the paragraph by filling in the blanks using the terms listed below.*

acceleration	**velocity**	**direction**
negative	**positive**	**time**

Acceleration occurs when an object's **1.** _____ changes. When an object speeds up, it has **2.** _____ acceleration. When an object's final velocity is less than its initial velocity, however, it has **3.** _____ acceleration. An object that is changing **4.** _____ is accelerating, even if its speed remains the same. Acceleration can be calculated by dividing the change in velocity by the **5.** _____ interval in which the change occurred. The SI unit of **6.** _____ is m/s^2.

Directions: *Match the terms in Column II with the descriptions in Column I. Write the letter of the correct term in the blank at the left.*

Column I

_____ **7.** result in a net force of zero

_____ **8.** the tendency of an object to resist any change in its motion

_____ **9.** cause an object's velocity to change

_____ **10.** a push or pull that can change an object's motion

_____ **11.** states that an object at rest will remain at rest unless acted upon by a net unbalanced force

_____ **12.** the combined force on an object

Column II

a. force

b. net force

c. unbalanced forces

d. balanced forces

e. inertia

f. Newton's first law of motion

Meeting Individual Needs