**Chapter 2 Review Answers**

**Section 1 Reinforcement – Describing Motion**

**1.** e

**2.** b

**3.** a and c

**4.** d

**5.** walking home

**6.** You can tell an object has moved because its position has changed.

**7.** Displacement is how far and in what direction an object has moved from its starting point.

**8.** Instantaneous speed indicated on the speedometer.

**9.** A horizontal line on a distance-time graph indicates that an object is stationary.

**10.** Speed is calculated by dividing the distance moved by the time elapsed.

**11.** A race car driving around a track at 240 km/h can have a constant speed.

**Section 2 Reinforcement – Acceleration**

**1.** Acceleration is the rate of change of velocity.

**2.** It accelerates when it changes its speed and/or direction.

**3.** Positive acceleration occurs when an object’s speed increases; negative acceleration occurs when an object’s speed decreases.

**4.** change in velocity (final velocity minus initial velocity) divided by time

**5.** meters/second/second (m/s/s); meters/second2 (m/s2)

**6.** acceleration

**7.** *a = (vf – vl)/t =* (9 m/s – 3 m/s)/3s

= 2 m/s2

**8.** positive

**9.** negative

**10.** zero

**Section 3 Reinforcement – Motion and Forces**

**1.** Force is a push or a pull that one object exerts on another.

**2. (**Answers will vary.) Examples might include fingers on pencil; body on chair; feet on floor; atmosphere on body.

**3.** The direction of the motion will change in the direction of the force.

**4.** It is the net force.

**5.** The forces are balanced.

**6.** The forces acting on the rock are not balanced; the net force is not zero.

**7.** It is the tendency of an object to resist any change in its motion.

**8.** Velocity changes when the object speeds up, slows down, or changes direction.

**9.** Its mass determines its inertia.

**10.** An object moving at constant velocity continues to move at that velocity until a net force acts on it.

**Key Terms – Chapter 2: Motion**

**(Crossword Puzzle)**