

Content Practice A**LESSON 3****Acceleration**

Directions: On each line, write the term from the word bank that correctly completes each sentence. Each term is used only once.

backward **constant** **decreasing** **direction** **forward**
increasing **speed** **velocity** **x-axis** **y-axis**

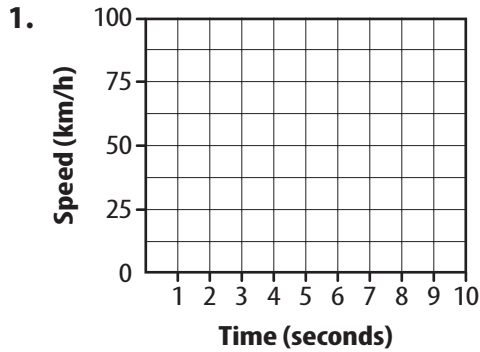
1. A moving object undergoes an acceleration when its _____ or _____ changes.
2. When a moving object slows down, its acceleration and _____ are in opposition.
3. When a moving object slows down, an arrow representing its acceleration flips from _____ to _____.
4. On a speed-time graph, speed is plotted on the _____, and time is on the _____.
5. On a speed-time graph, a(n) _____ speed is shown by a line going upward from the left.
6. On a speed-time graph, a(n) _____ speed is shown by a line going downward to the right.
7. On a speed-time graph, a(n) _____ speed is represented by a horizontal line.

Content Practice B

LESSON 3

Acceleration

Directions: On the speed-time graph below, draw a line showing the motion of a test car that moved forward at a speed of 50 km/h and crashed into a barrier at the 5-second mark. Continue the line for the full 10 seconds.



Directions: Answer each question or respond to each statement on the lines provided.

2. What is acceleration?

3. When a moving object reduces its speed, what happens to the object's acceleration in relation to its velocity?

4. Why is a car rounding a curve accelerating, even if it is moving at a constant speed?

5. What does each letter in the following equation stand for: $a = (v_f - v_i)/t$?
