

## Acceleration

- 1. What is acceleration?
  - a. change in velocity divided by the time it takes
- 2. When is an object accelerating?
  - b. the rate of change in speed and/or direction
- 3. What is the difference between positive and negative acceleration?
  - c. m/s and km/s
- 4. How is acceleration calculated?
  - d. the way speed is changing speeding up versus slowing down.
- 5. Two ways the unit for acceleration to be written.
  - e. when it changes speed or direction
- 6. What the slope of a velocity-time graph indicate?
  - f.  $\text{km/s}^2$  and  $\text{m/s/s}$
  - g. the speed at which an object is traveling
- 7. An inline skater traveling in straight line goes from 3m/s to 9m/s in 3 second. What is the acceleration?
$$\frac{\text{ending velocity} - \text{beginning velocity}}{\text{time}} = \text{unit (could be more than one correct unit)}$$
$$\frac{\text{m/s} - \text{m/s}}{\text{s}} = \text{m/s/s or m/s}^2$$

### Drag and drop to identify the graph.

negative acceleration

constant speed

positive acceleration

