# Acceleration Concept Sheet

To help get a better understanding of the difference between speed and acceleration, let's imagine taking a snapshot of where an object is once every single second for several seconds. For this sheet, let's also keep things a little straightforward and always say that the pictures show things moving to the right, and never going backwards.

Questions 1 to 5 refer to the following picture.

Start
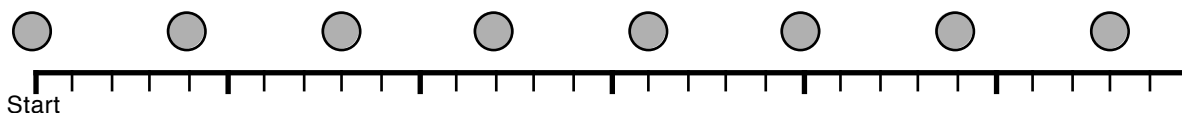
1. What is true about the distance between each position?

2. What is true about the average speed between each position?

3. Sketch what it would look like if it was going twice as fast:
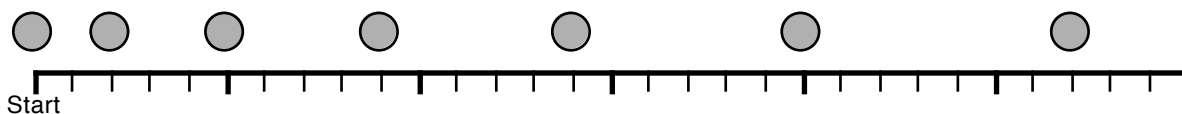

4. Sketch what it would look like if it was going half as fast:

5. If an object has a constant speed what is happening? (In other words, what is meant by the phrase "constant speed?"
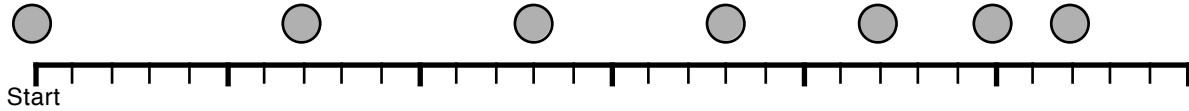

Questions 6 to 7 refer to the following picture. Something very important is different.

Start

6. What is true about the distance between each position?

7. What is true about the average speed between each position?

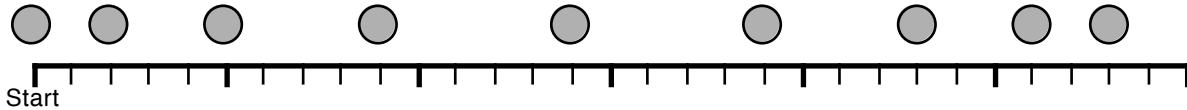8. Was this speeding up or slowing down. How do you know?

Acceleration Concept Sheet

Questions 9 to 11 refer to the following picture.

9.   What is true about the distance between each position?

10. What is true about the average speed between each position?

11. Was this speeding up or slowing down. How do you know?

Questions 12 to 14 refer to the following picture.

12. What is true about the distance between each position?

13. What is true about the average speed between each position?

14. Was this speeding up or slowing down (Be careful!) How do you know?

15. Where was it going the fastest? How about the slowest?

Questions 16 to 20 refer to the graph shown to the right.

16. Describe the motion shown by the graph.

17. Each second, how much faster is the object moving?

18. What is the slope of the graph?

19. What is the acceleration of the object?

20. What could the object be?