Go! Go! Go!

This experiment affords students an opportunity to collect data from an observable event, make measurements, and plot a graph of the results. They can then interpret the graph. The car speed and size of table should allow at least four data points.

Answers to Summing Up Questions

1. a. The marks would be farther apart.

b. The car would reach the edge in fewer seconds.

c. The slope would have been steeper (more vertical).

2. A steeper straight line should be added to the graph.

3. a. The marks would be closer together.

b. The car would take more seconds to reach the edge.

c. The slope would have been shallower (more horizontal).

4. A shallower straight line should be added to the graph.

5. a. The marks would get closer and closer together.

b. A curved line having a decreasing slope (concave down) should be added to the graph.

6. Line A shows an object moving in the opposite (“negative”) direction compared to direction of the moving car with constant speed.

Line B shows a car moving in the “positive” direction and speeding up.