

Pre-Activity Evaluation **Answers**

1. List all of the units that you know and can think of.

Example acceptable answers for length: meter, foot, mile, centimeter, kilometers, etc.; for time: second, hour day, year, etc.; for weight (kilograms, grams, pound, etc.; for speed: miles per hour, kilometers per hour, cm per second, etc.

2. Robots are useful in conducting scientific investigations. (circle one)

I strongly agree I agree I am neutral I disagree I strongly disagree

3. I have fun while I am learning in school.

I strongly agree I agree I am neutral I disagree I strongly disagree

4. I know how to measure distance traveled and time elapsed to determine an object's speed.

I strongly agree I agree I am neutral I disagree I strongly disagree

5. I can identify the units used to measure speed, time and distance.

I strongly agree I agree I am neutral I disagree I strongly disagree

6. I would like to use robots in science and mathematics lessons.

I strongly agree I agree I am neutral I disagree I strongly disagree

7. If a ball travels 20 cm in a straight line in 5 seconds, what is the ball's speed? (circle one answer)

A. 20 centimeters/second

B. 4 centimeters/second

C. 4 meters/second

D. 1 centimeter/second

E. 5 seconds

8. What is the equation to determine the speed of an object?

Distance divided by time

9. If a red car travels at 10 m/s and a blue car travels 15 meters in 3 seconds, which car is traveling faster? Why is it faster? How do you know? What are the units? Are they the same?

The blue cars speed is $\frac{15 \text{ meters}}{3 \text{ seconds}} = 5 \frac{m}{s}$, thus, the red car is traveling faster.

10. What two measurements do we need to know about an object's journey to determine its speed?

Distance and time

11. Which of the following is a unit of speed? (circle one answer)

A. meters/kilogram

B. centimeters

C. meters/minute

D. centimeters/meter

E. seconds