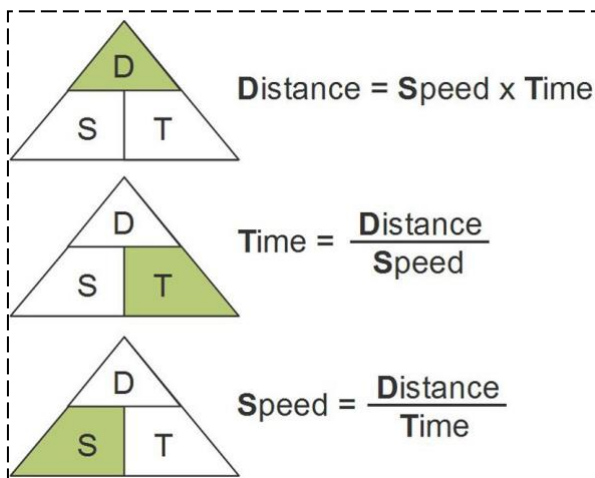Name: _____ Date: _____ Period: _____

Calculating Speed Practice

Answer each of the following questions. Show your work and don't forget units!!

1. Data taken from the liftoff of the space shuttle shows that in the first 10.00 seconds, the shuttle travels a distance of 933 feet. What is the shuttle's <u>average speed</u> during this time period?

2. A mousetrap-powered car can travel 20.0 meters in 15.0 seconds. What is the <u>speed</u> of the car?

3. A really fast armadillo can cross a road that is 20.00 meters long in 10.0 seconds. What is the <u>speed</u> of the armadillo?

4. A radio controlled car travels 27.0 kilometers in 28.5 minutes. What is the <u>speed</u> of the car?

5. A speedboat can, at full throttle, go 65.0 miles in 1.5 hours. What is the <u>average speed</u> of the boat?

6. What is the <u>speed</u> of a rocket that travels 9000 meters in 12.12 seconds?

7. What is the <u>speed</u> of a jet plane that travels 528 meters in 4 seconds?

8. After an impact involving a non-functioning satellite, a paint chip leaves the surface of the satellite at a speed of 96 m/s. After 17 seconds, <u>how far</u> has the chip landed?

9. The space shuttle Endeavor is launched to altitude of 500,000 m above the surface of the earth. The shuttle travels at an average rate of 700 m/s. <u>How long</u> will it take for Endeavor to reach its orbit?

10. How long will your trip take (in hours) if you travel 350 km at an <u>average speed</u> of 80 km/hr?

11. <u>How many seconds</u> will it take for a satellite to travel 450 km at a rate of 120 m/s?

12. What is the <u>speed</u> of a walking person in m/s if the person travels 1000 m in 20 minutes?

13. <u>How far</u> (in meters) will you travel in 3 minutes running at a rate of 6 m/s?