Velocity Worksheet SHOW YOUR WORK Name

Find the answer to each of the problems below. Show your work. Use the correct units. Remember $v=d/t \quad d=v^*t \quad t=d/v$

- 1. What is the average velocity of a cheetah that sprints 100 meters in 4 seconds?
- 2. If the cheetah were running at 22 m/s, how long would it take him to run 400 meters?
- 3. What is the velocity in meters per second (m/s) of a bass chasing a goldfish if it travels a distance of 650 cm in .5 seconds? (change cm to m first)
- 4. What is the velocity of a toy car if it travels 5.6 meters in 3 seconds?
- 5. What is the average velocity of a car that .5 hours to drive across Olathe, a distance of 6 miles?
- 6. What distance could an laden African Swallow travel if it were flying at 17 m/s for 600 seconds?
- 7. A football player practicing sprints ran 250 meters in 30 seconds. What was his average speed?
- 8. The next day he ran the same distance in 27 seconds. What was his average speed?
- 9. What is the velocity of Nolan Ryan's fast ball if it travels 4.6 meters in .1 seconds?
- 10. How long would it take an F-15 Eagle fighter jet to fly north to Worlds of Fun from Olathe if the distance is 40 miles and the jet can fly 1650 miles per hour?
- 11. Maurice Green runs the 100 meter dash in 9.87 seconds. What is his average velocity?
- 12. Michael Johnson ran the 200 m dash in 19.66 seconds at the '96 Olympic Trials. What is his average velocity?
- 13. If Michael were to run in the 100 meter dash, predict by calculating what his time would be using the velocity calculated in question 6. Explain why this would not actually be the case.
- 14. Johnson's time for the 400 meter dash at the '96 trials was 43.44 seconds. What was his average velocity for this race?