

Name_____

Period_____

Speed Quiz Practice Problems: *Be sure to show known, unknown and equation needed. Make sure answers have the right amount of sig figs!*

- 1) A cheetah ran a distance of 112.0 meters in a time of 4.0 seconds. How fast did the cheetah run in meters per second?

- 2) How much time would it take for the sounds of thunder to travel 1500 meters if the speed of sound is 330 meters per second?

- 3) A snail can travel approximately 0.30 meters/minute. How many meters can a snail cover in 15 minutes?

- 4) A car travels 300. miles in 5.5 hours. What is the average speed of the plane?

- 5) You won a Surf trip to Bells Beach Australia, which is 15,040 km from Denver. How many hours would the flight be if you were on a plane traveling at 790 km/hr?

6) Using the information from question # 1, how fast does the cheetah run in miles per hour (there are 1609 meters in one mile).

7) **Challenge:** The Earth is approximately 93 million miles from the Sun. It takes 17 minutes for the sun's energy to get to the Earth and then reflect off the Earth returning back to the sun. What is the speed the sun's energy is traveling? (give your answer in miles per hour)

8) **Challenge:** Using your answer from question # 7 above, how long would it take for the Sun's light to reach Mars (in seconds) given the speed of light is 3.0×10^8 meters/sec. Mars is 1.5 x the distance Earth is to the Sun.
(Show all of your work including conversions)

9) **Challenge:** Based on what you have learned, if the sun burned out, Earth would experience darkness before Mars. How many minutes after Earth would Mars experience darkness?