

Name: _____

Date: _____

Period: _____

Astronomy – Distance to Earth

The fastest land animal is the cheetah. They can reach speeds of up to 70 miles per hour for short distances. Olympic sprinters run somewhere between 20 and 30 miles per hour, so don't try to outrun a cheetah. But even cheetahs pale in comparison to the Peregrine Falcon, the world's fastest animal, capable of diving at over 200 miles per hour.

But even these animal speeds don't come close to the fastest thing in the universe, light. Find out what the speed of light is (in a vacuum, like space) in

Miles per second: _____

Kilometers per second: _____

The earth is 93 million miles from the sun at the above speed how long would it take light to travel from the sun to the earth? (use 150,00 mph if you could not find the true speed of light) **Show your Work**

What world are you researching? _____

How far is this world from earth, you can look it up or remember that earth is the third planet from the sun and calculate its distance knowing that earth is 150 million kilometers from the sun. **Show your Work**

Since no planet, moon, dwarf planet or other type of world produces its own light, when we see worlds, we are seeing the sun's light reflecting off the world. How long will it take for the reflected light from your world to reach the earth? **Show your work.**