

Solar System Scale Model

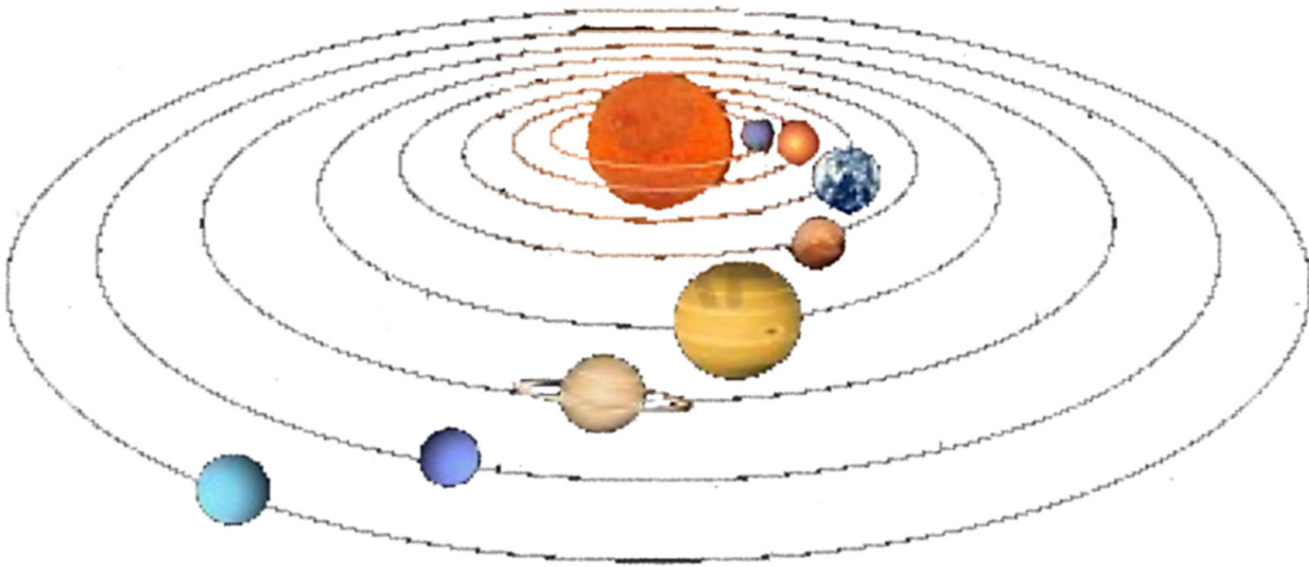
An attempt to describe a "manageable" scale model of the Solar System.

For this scale, we will start with the diameter of Earth to be 1".
The Sun would then be 9'1" in diameter (roughly floor to ceiling).
Earth would be 976' from the Sun, roughly the height of the Eiffel Tower.
Mercury would be 0.4" diameter and 378' from the Sun.
Venus would be 0.95" diameter and 705.5' from the Sun.
Mars would be 0.5" diameter and 1487' from the Sun, about a quarter of a mile.
Jupiter would be 11.2" diameter and 5078' from the Sun, almost 1 mile.
Saturn would be 9.1" diameter and 9312' from the Sun, about 1-3/4 miles.
Uranus would be 3.7" diameter and 18,781' from the Sun, about 3.6 miles.
Neptune would be 3.6" diameter and 29,366' from the Sun, about 5.6 miles.
Pluto would be 0.2" diameter and 38,587' from the Sun, about 7.3 miles.

At this scale, the speed of light would be reduced to 2' *per second*!

To go one step farther, we can fit this model on one 8-1/2 x 11" piece of paper.
Use graph paper with 1/4" squares and let each 1/4" represent 1000 feet using the above scale.
The Sun, which represents far more than 99% of the Solar System's mass, would be 0.0021" in diameter (half as thick as this piece of paper).
Pluto would be 9.5" from the Sun, but Mercury, Venus, and Earth are all less than 1/4" from the Sun!

The drawing below is very much *not* to scale!



The relative sizes of Solar System objects.
The Sun would be 9'1", roughly floor to ceiling.

