

## Pacing Our Solar System

The chart below gives the scaled sizes and distances of the planets if the Sun were the size of a softball. Using these numbers, mark the distances in the model of planetary orbits, as instructed. One very large stride is roughly equal to a meter. As you can see, most of space is just that, SPACE!

Planet	Scaled Planet Diameter (reduced by a factor of 10 billion)	Scaled Distance from Sun (reduced by a factor of 10 billion)	Number of Steps or Hops	Light Time from Sun (minutes)	Spacecraft Travel Time
<b>Sun</b>	13.9 cm (softball)	-	-	-	-
<b>Mercury</b>	0.05 cm (dust)	5.8 m		3.2	5 months
<b>Venus</b>	0.12 cm (grain of sand)	10.8 m		6	3 months
<b>Earth</b>	0.13 cm (grain of sand)	15.0 m		8.3	N/A
<b>Mars</b>	0.07 cm (dust)	22.8 m		12.7	8 months
<b>Jupiter</b>	1.43 cm (marble)	77.8 m		43	1.5 years
<b>Saturn</b>	1.2 cm (marble)	142.4 m		78	3.2 years
<b>Uranus</b>	0.51 cm (peppercorn)	286.7m		162	8.5 years
<b>Neptune</b>	0.49 cm (peppercorn)	448.9 m		252	12 years
<b>Pluto</b>	0.02 cm (dust)	591.0 m		330	Not visited yet