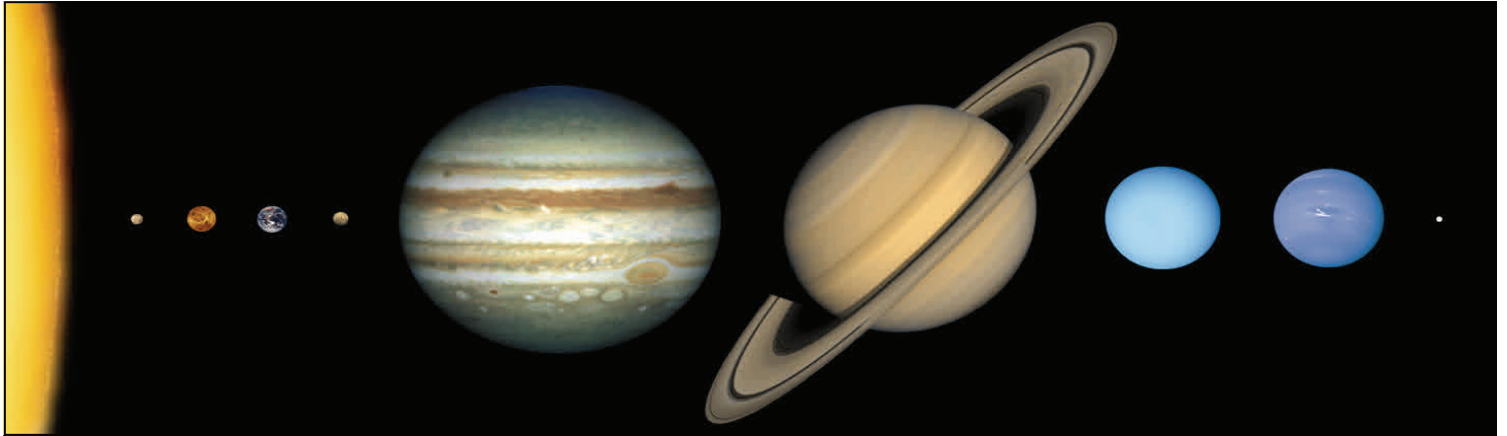


Solar System scale model



The Solar System is often portrayed as a line of planets, closely packed to each other. But this picture is misleading! There is a lot of space in space!

Astronomical distances are measured in km and in Astronomical Units (AU). 1 AU is 149,600,000km and is the same distance between the Sun and the Earth.

A light year measures further distances. Light, travelling at 300,000 km/s takes only 8.3 minutes to travel from the Sun to the Earth. Our nearest star after our Sun is 4.3 Light years away. 1 l.y. is approximately 10 million million km.

If we scale 1AU to a metre, the Sun could be represented by a ball bearing or 1cm wide.

Use the table below to create your own accurate Solar System scale model. Create your own Solar System in your classroom, or school corridor!

	Scaled Distance from the Sun	Light travel time	Scale model diameter
Mercury	38.7cm	3.2 minutes	0.035mm
Venus	72.3cm	6 minutes	0.087mm
Earth	1m	8.3 minutes	0.092mm
Mars	1.52m	12.6 minutes	0.049mm
Jupiter	5.2m	43.2 minutes	1.026mm
Saturn	9.54m	1hr 19 minutes	0.862mm
Uranus	19.18m	2hrs 11 minutes	0.360mm
Neptune	30.06m	4hrs 11 minutes	0.355mm
Pluto	39.44m	5hrs 31 minutes	0.016mm
Our Moon	1m	8.3 minutes	0.025mm

Go onto your playground and create a moving Solar System with these distances, how long are each planet's orbits/years?