

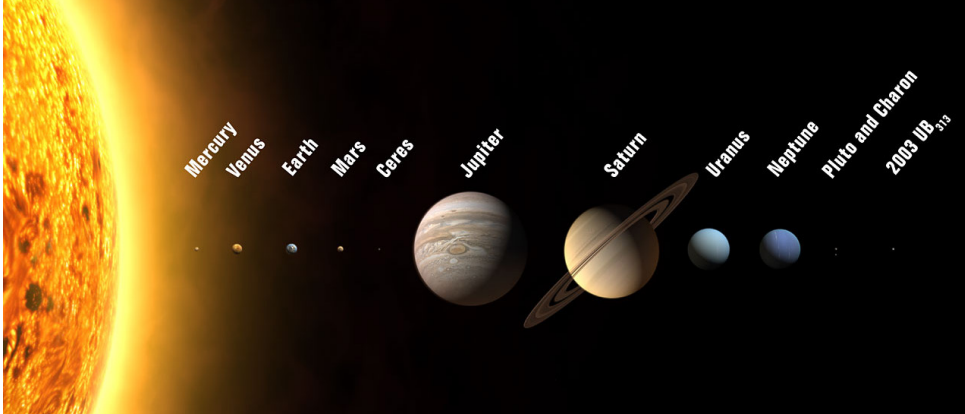
LEARNING RESOURCE

EARTH'S PLACE IN OUR SOLAR SYSTEM

MAKE YOUR OWN SCALE MODEL

SCIENCE AND TECHNOLOGY K-6
EARTH AND SPACE Stage 3

How does the Earth compare to other planets in the Solar System?



SEE

What do you see when you look at this picture of our Solar System?

THINK

What do you think about our Solar System and how it is shown here? Think about the scales used for both size and distance.

WONDER

What do you wonder about our Solar System and perhaps the other systems that may be part of our Universe?

CREATE

We often see our Solar System drawn as shown above, but is it realistic?

Let's investigate. In the table below we have TWO options to help you make your own scale model of our Solar System. Both use the same scale for size and distance. The first shows the size of our Solar System if we make the Sun 10mm wide. The second limits the size of our Solar System to a length of 10m. You can use either to scale up or down if you want to make a different size model but be careful because at 10m long the planets will be ... tiny!

SHARE

Share a picture of your model using #SolarSystem

MORE

How does your model compare to the picture above. Why does everyone draw it like that?

Next time you see a picture of our Solar System, think about the model you made and the reality of the situation. Space, including our Solar System is mostly ... _ m _ _ y.

	If you make the Sun 10mm wide, the size of each planet will be ...	Distance from the Sun (m)	If your Solar System has to fit into a room or space 10m long, then each object will be ...	Distance from the Sun (m)
The Sun (mm)	10.00	N/A	2.36	N/A
Mercury (mm)	0.04	0.42	0.01	0.10
Venus (mm)	0.09	0.78	0.02	0.18
Earth (mm)	0.09	1.07	0.02	0.25
Mars (mm)	0.05	1.64	0.01	0.39
Jupiter (mm)	1.00	5.59	0.24	1.32
Saturn (mm)	0.84	10.30	0.20	2.43
Uranus (mm)	0.36	20.61	0.09	4.86
Neptune (mm)	0.35	32.28	0.08	7.61
Pluto (mm)	0.02	42.41	0.004	10.00