

Planetary Data:

The following table lists statistical information for the planets:

	Orbital Distance (10^6 km)	Radius (km)	Mass (10^{24} kg)	Rotation Period (hours)	# Moons	Orbital Period (days)	Density (g/cm^3)
Mercury	57.9	2439	.3302	1407.6	0	88.	5.43
Venus	108.2	6052	4.869	5832.5	0	224.7	5.25
Earth	149.6	6378	5.975	23.93	1	365.2	5.52
Mars	227.9	3393	0.6419	24.62	2	687.	3.95
Jupiter	778.3	71492	1898.6	9.92	16	4330.6	1.33
Saturn	1427	60268	568.5	10.5	18	10747.	0.69
Uranus	2869.6	25559	86.83	17.24	15	30588.	1.29
Neptune	4496.6	24766	102.43	16.11	8	59800.	1.64
Pluto	5913.5	1137	0.0125	153.1	1	90591.	2.03

Activity: The Planets and Scale

Using the information from the table (and images), please answer the following questions:

Q: Which planet is about the same size as the Earth?

A: Looking at the Radius column of the table, and the picture of the terrestrial planets, the answer is Venus .

Q: Which planet is just a little smaller, and has about the same rotation period as the Earth?

A: Mars. The period of rotation is the time it takes for the planet to spin 360 degrees on its axis--- in other words, it's the length of our day. A day on Mars would be just about as long as it is on the Earth.

Q: Which planet is the largest in the solar system?

A: Jupiter.

Q: Using the Radius column of the table, How many times larger than the Earth is Jupiter?

A: Jupiter's radius is 71492 km and the Earth's is 6378 km, making Jupiter more than 11 times larger than the Earth.

Student Worksheet: The Planets and Scale

Using the information from the table (and images), please answer the following questions:

Q: Which planet is about the same size as the Earth?

Q: Which planet is just a little smaller, and has about the same rotation period as the Earth?

Q: Which planet is the largest in the solar system?

Q: Using the radius column of the table, how many times larger than the Earth is Jupiter?
