

notebook

Solar System

RAND McNALLY

Planet	Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto
Distance from the Sun	57.9 million km (36 million miles)	108.2 million km (67.2 million miles)	149.6 million km (93 million miles)	227.9 million km (141.6 million miles)	778.3 million km (483.6 million miles)	1.4 billion km (888.2 million miles)	2.9 billion km (1.8 billion miles)	4.5 billion km (2.8 billion miles)	5.9 billion km (3.7 billion miles)
Diameter	4,878 km (3,031 miles)	12,104 km (7,521 miles)	12,756 km (7,926 miles)	6,794 km (4,222 miles)	142,800 km (88,700 miles)	120,700 km (75,000 miles)	51,100 km (31,700 miles)	48,600 km (30,200 miles)	2,280 km (1,416 miles)
Average Temperature	171°C (340°F)	464°C (867°F)	14°C (58°F)	-25°C (-13°F)	-148°C (-234°F)	-178°C (-288°F)	-213°C (-351°F)	-216°C (-357°F)	-223°C (-369°F)
Length of Day (in Earth time)	58 days, 15 hours, 30 minutes	243 days, 14 minutes	23 hours, 56 minutes	24 hours, 37 minutes	9 hours, 56 minutes	10 hours, 41 minutes	16 hours, 48 minutes	16 hours, 3 minutes	6 days, 9 hours, 17 minutes
Length of Year (in Earth time)	87.97 days	224.7 days	365.25 days	1 year, 321.73 days	11 years, 314.96 days	29 years, 167.25 days	84 years, 3.65 days	164 years, 288.54 days	248 years, 182 days

Did You Know...

Mercury it orbits the Sun faster than any other planet. Mercury was named for the speedy messenger of the Roman gods.

Venus is the hottest planet—hotter even than Mercury, which is closer to the Sun—because the large amount of carbon dioxide in its atmosphere traps heat.

The Earth's orbit time around the Sun is actually 365.25 days, 1/4 day longer than our 365-day calendar year. For this reason, we add an extra day—February 29—to the calendar every fourth, or "leap" year.

Iron oxides, or rust, in Mars' soil give the planet its reddish hue and its nickname "the Red Planet."

Jupiter is the largest planet in the solar system. More than 1,300 Earths could fit inside it.

Saturn is best known for its beautiful rings, which are made up of tiny particles of ice.

Because of the unusual tilt of its axis, Uranus looks like it's tipped sideways.

An enormous storm system moving around its surface gives Neptune a "Great Dark Spot" similar to Jupiter's "Great Red Spot."

Most of the time, Pluto is the farthest planet from the Sun. At certain times, however, Pluto's orbital path moves inside Neptune's. Until 1999, Neptune is actually farthest from the Sun.

Space-speak

Asteroid: one of the thousands of minor planets in our solar system; most lie between Mars and Jupiter.

Atmosphere: gases that surround and protect planets and other bodies.

Black hole: an invisible region in space surrounding a collapsed star, from which no light can escape.

Comet: a piece of space debris, made up of ice, gas, and dust, that orbits the Sun. A long bright tail forms when the comet is close to the Sun.

Galaxy: a cluster of stars, planets, gas, and dust. Our solar system lies in the Milky Way Galaxy, which contains some 200 billion stars.


Meteoroid: a piece of rock hurtling through space.

Meteoroids that enter Earth's atmosphere and burn up are called meteors, also known as "shooting stars."


Solar system: the collective term for the Sun, the nine planets, and all of the satellites, comets, asteroids, meteoroids, dust, and gas that orbit the Sun.

Star: a glowing sphere of gas that creates its own light. The Sun is the nearest star to Earth.

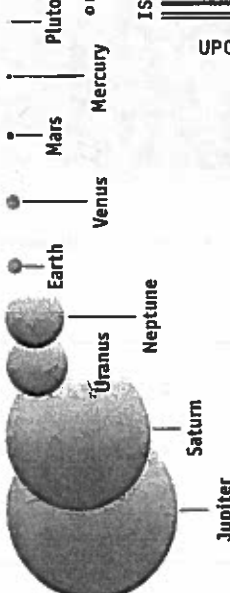
Sizing up the Planets



The Moon
Distance from Earth: 387,000 km (238,000 miles)
Diameter: 3,746 km (2,160 miles)
On the Moon it is always silent because there is no air to carry sound waves.



The Sun
Diameter: 1,392,000 km (865,000 miles)
Mass: 333,000 times greater than Earth
Surface temperature: 5,700°C (10,300°F)
Compared to other stars, the Sun is tiny. Astronomers have located a star that is more than 3,500 times larger than the Sun.



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It's a big "neighborhood!"

If you were going to take an imaginary trip to the sun from any of these planets, here's how long it would take to get there.

PLANET	HOW FAR TO THE SUN?		
	Walking (1 three-foot step= 1 million miles)	Driving (70 m.p.h.)	Flying (600 m.p.h.)
Mercury	36 steps	57 years	7 years
Venus	67 steps	106 years	13 years
Earth	93 steps	147 years	18 years
Mars	142 steps	225 years	28 years
Jupiter	483 steps	765 years	94 years
Saturn	885 steps	1,401 years	172 years
Uranus	1,785 steps	2,826 years	347 years
Neptune	2,800 steps	4,433 years	544 years
Pluto	3,664 steps	5,801 years	712 years

