



Planets in Our Solar System

There are eight planets orbiting our Sun. Each planet orbits the Sun on its own path. The planets' paths are hundreds of millions of kilometres apart. At any point in time, the planets are usually all at very different places along their paths. So, the distance between planets is even greater. Earth is so far from the Sun that the Sun's light takes eight minutes to reach our planet.

Each planet spins around as it orbits the Sun. On Earth, this creates night and day as different sides of the planet get sunlight. The time it takes for a planet to orbit the Sun is one year. Earth's year is 365 days long. Other planets have shorter years than Earth and some have much longer years.

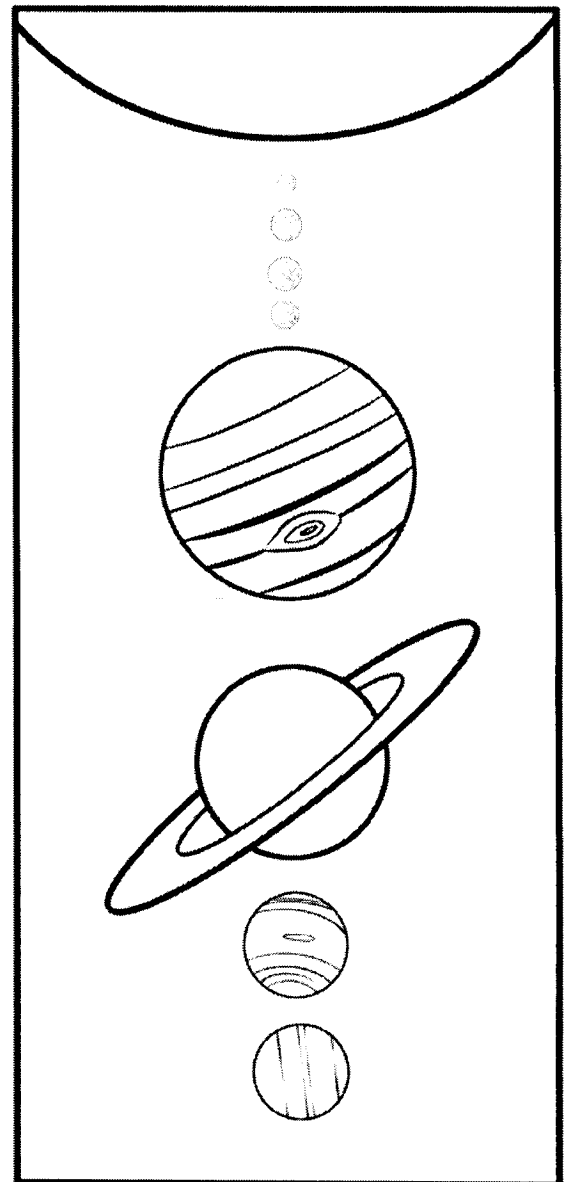
Some planets have moons and some have rings. Some have atmosphere, winds, and storms. Huge craters, mountains, and canyons can be seen on some planets. Match each planet to a description below.

Mercury

Mercury is the closest planet to the Sun and is the smallest planet in our solar system. The surface is grey and rocky and has a lot of craters. With almost no atmosphere, it does not have storms, clouds, winds, or rain. With no atmosphere to trap the daytime heat, the temperature can drop 600°C from day to night. No other planet has such an extreme temperature range.

Venus

Venus is about the size of Earth. The temperature on the surface is hot enough to melt lead. In fact, no planet is hotter than Venus. Not even Mercury, which is the planet closest to the Sun. Mercury and Venus are the only two planets that do not have moons orbiting them. Venus is easy to see. It reflects the Sun's light so brightly that some people mistake it for a star.





Earth

From space, Earth looks blue. That is because oceans cover 70 percent of Earth's surface. Earth is the third planet from the Sun and the largest of the four rocky planets. It is the densest planet. Earth spins on a tilt as it orbits the Sun. This tilt means that half the planet gets more solar energy than the other half. This tilt is the reason Earth has changing seasons.

Mars

Iron in the soil gives the planet a reddish colour. Huge dust storms can almost cover the planet. Mars is about half the size of Earth, but has the highest mountain and the largest canyon of any planet. Space probes have looked for life on Mars, but found none. But scientists think the planet may once have been covered in rivers and oceans.

Jupiter

Jupiter is called a gas giant. This planet is so big that all other planets could fit inside it. Jupiter has at least 64 moons—more than any other planet. One moon is larger than Mercury. Jupiter is the fifth planet from the Sun, but can be seen easily from Earth. A space probe showed that Jupiter is circled by faint dark rings made of dust and bits of rock.

Saturn

No other planet has rings so bright. These rings are made of pieces of dust, rock, and ice. Some are as small as a fingernail, others are as big as a house. Some experts think the rings contain materials left over from when Saturn formed. Others think the rings contain pieces of nearby moons, chipped off by meteorites.

Uranus

Uranus is the only planet tilted on its side. Some experts think it may once have been hit by something huge that knocked it on its side. The planet is the third-largest in our solar system and is surrounded by faint rings. Unlike other planets, it has no cloud bands or storms. Uranus is so far from the Sun, that sunlight on Earth is 400 times brighter than the sunlight on Uranus.

Neptune

Neptune is a giant blue ball with wisps of white clouds. The winds blow up to 2000 km/h on Neptune. No other planet has faster winds. Neptune is about the same size as Uranus and is the second-farthest planet from the Sun. There are four seasons on Neptune, but each season lasts more than 40 Earth years.



"Planets in Our Solar System"—Think About It!

1. Mars has two moons: Phobos and Deimos. How many moons do the four planets closest to the Sun have all together? _____
2. Which planet has the highest-known mountain? _____
3. Which planet is the hottest? _____
4. Which planet is the smallest? _____
5. Which planet is the largest? _____
6. Which planet is the densest? _____
7. Which planet has the greatest daily temperature change? _____
8. Which planet spins on its side? _____
9. Imagine the Sun is the size of a basketball. Now match each planet with an item about its size. (Hint: three pairs of planets are about the same size as each other. For instance, Venus is almost the same size as Earth.)

a) Mercury	i) small number cube
b) Venus	ii) gum ball
c) Earth	iii) peppercorn
d) Mars	iv) large marble
e) Jupiter	v) black bean
f) Saturn	vi) kernel of corn
g) Uranus	vii) pea
h) Neptune	viii) small marble

Brain Stretch

Here is the order of the planets, starting with the planet closest to the Sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune. The sentence below can help you remember the order of the planets. The first letter of each word is the first letter of a planet.

My Very Efficient Mother Just Served Us Noodles.