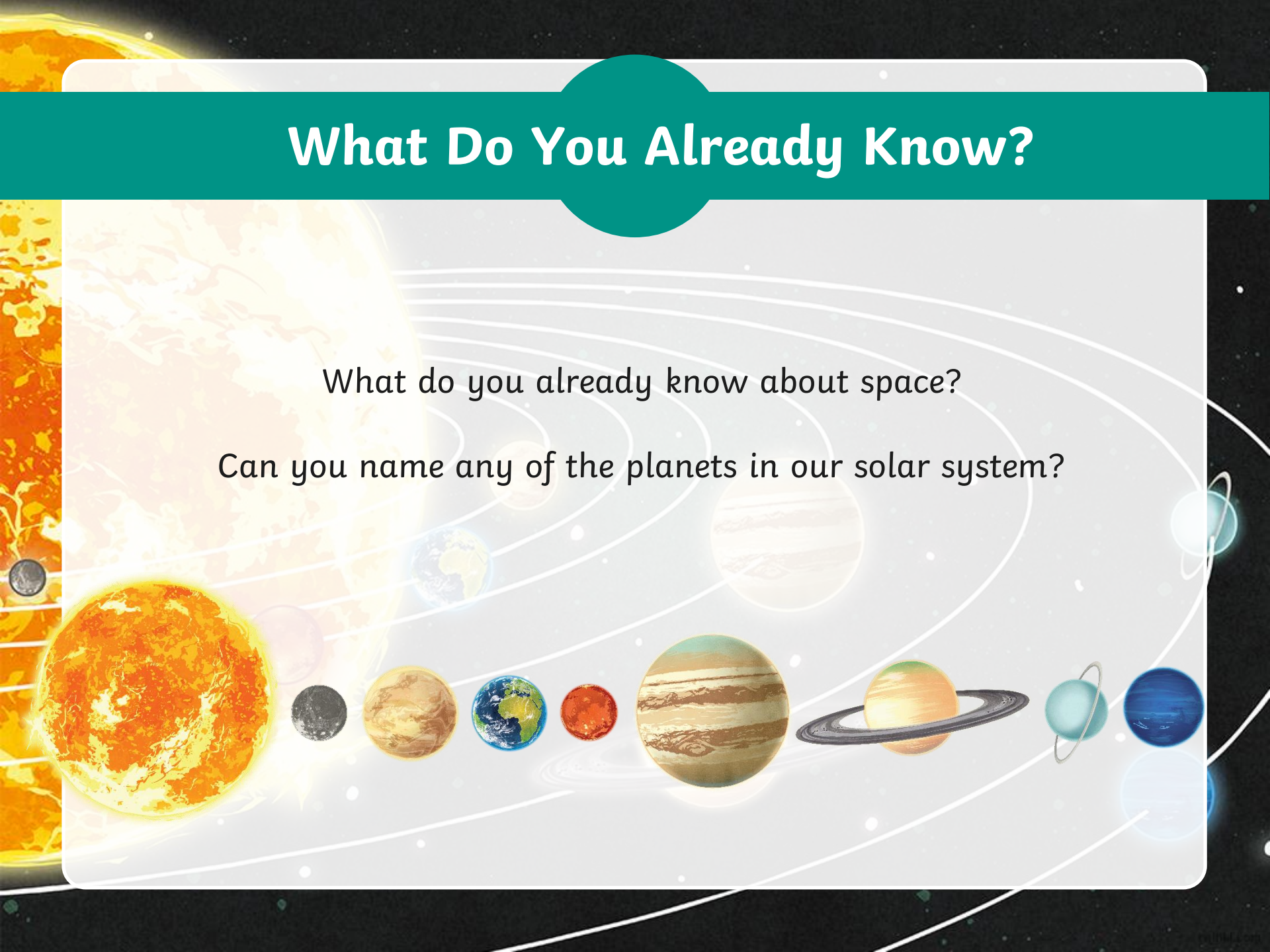


What Do You Already Know?

What do you already know about space?

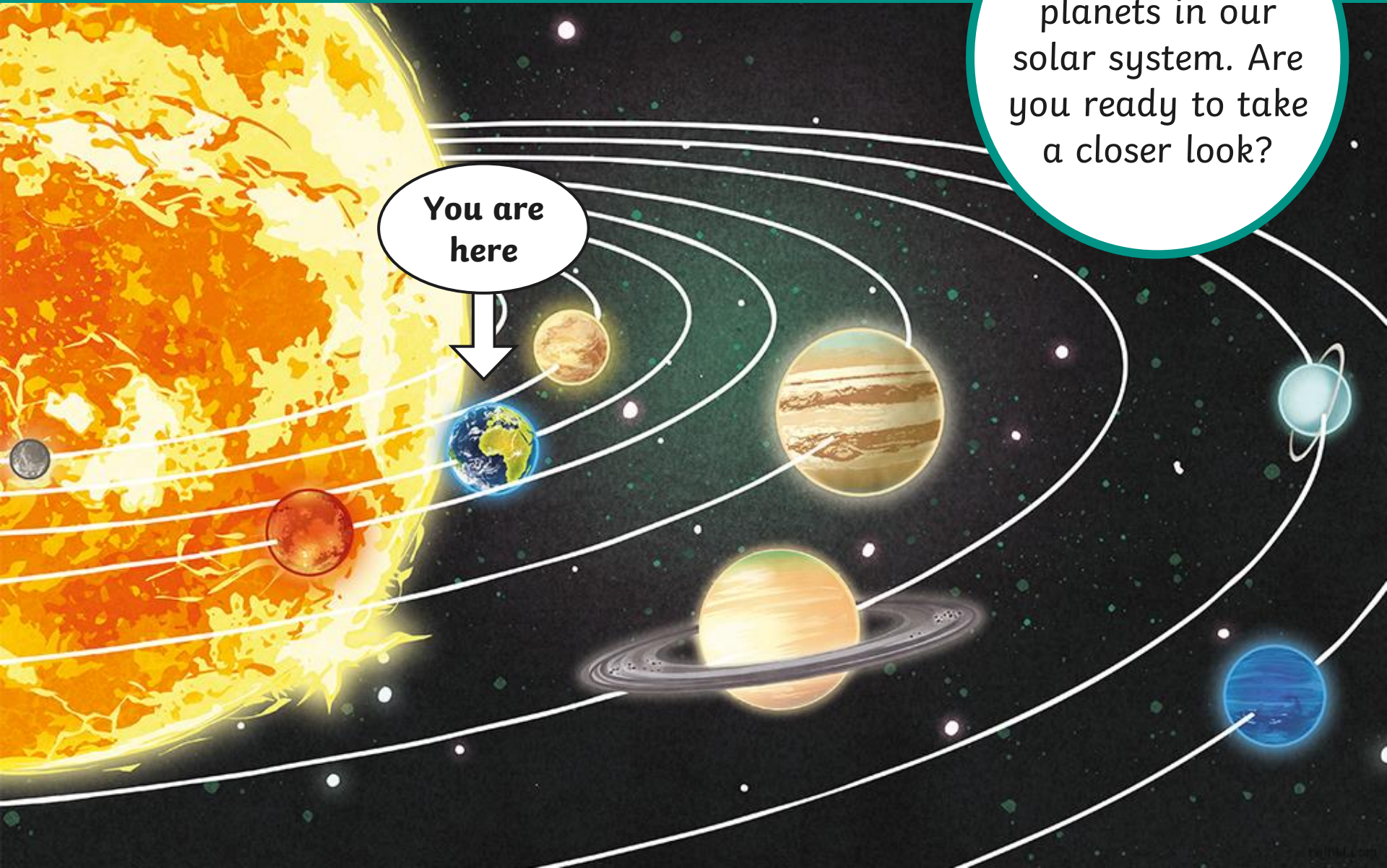
Can you name any of the planets in our solar system?



The Planets

There are eight planets in our solar system. Are you ready to take a closer look?

You are
here



The Planets



The Sun

A diagram of the solar system. The Sun is a large, glowing orange and yellow sphere on the left. Several white elliptical orbits curve around it. A white circle with the text 'The Sun' and a white arrow points to the Sun. In the bottom left corner, there is a small circular inset showing a close-up of the Sun's surface. In the bottom right, a blue planet (Earth) is visible on one of the orbits. In the center, a yellow planet (Jupiter) is visible. To its right, a planet with rings (Saturn) is visible. The background is black with small white stars.

The Sun is a star in the middle of our solar system. It is incredibly hot – temperatures on the surface of the Sun can reach 5500°C!

People used to believe that the Sun and the other planets moved around the Earth. However, we now know that the Sun is in the centre of the solar system and that the Earth and all the other planets move around it.

The Planets

Distance from the Sun:

58 million kilometres

One day lasts: 59 Earth days

One year lasts: 88 Earth days



Mercury

Mercury is the closest planet to the Sun, and the smallest planet in our solar system. It does not have any moons or rings. Its rocky surface is covered with craters caused by meteors hitting the planet.

The Planets

Distance from the Sun:

108 million kilometres

One day lasts: 243 Earth days

One year lasts: 225 Earth days



Venus

Venus is the second planet from the Sun. It is often called Earth's sister planet, as they are similar in size and made of similar materials. However, the surface of Venus is not where you'd want to be. The atmosphere is so thick that it would crush you – and the planet is completely covered by clouds of sulphuric acid that smell like rotten eggs!

The Planets

Distance from the Sun:

150 million kilometres

One day lasts: 24 hours

One year lasts: 365 days

Did you know that Earth is nicknamed the Blue Planet? From space, we can see that it appears blue because around 71% of the Earth's surface is covered by water. Earth was formed around 4.54 billion years ago and is currently the only known planet to support life.



Earth

The Moon

Distance from the Sun:

150 million kilometres

One day lasts: 27.3 days

One year lasts: 365 days



Some planets in our solar system have dozens of moons, and some planets have no moons at all. Earth has one moon. In 1969, Neil Armstrong was the first person to ever walk on the Moon. As he took his first step onto the surface of the Moon, he said the now-famous words: 'That's one small step for man, one giant leap for mankind.'



The Planets

Distance from the Sun:

228 million kilometres

One day lasts: 24 hours
and 37 minutes

One year lasts: 687 days

Mars is the fourth planet from the Sun. It is sometimes called the Red Planet because of the brownish-red colour of its rocky surface. Space agencies have sent many rover missions to Mars to explore the surface and find out if Mars might have had life in the past. To date, no proof of any past or present life on Mars has been found.



Mars

The Planets

Distance from the Sun:

778 million kilometres

One day lasts: 10 hours

One year lasts: 11.9 Earth years

Jupiter is the fifth planet from the Sun, and the largest planet in our solar system. Jupiter is a gas giant – a giant planet mainly made up of gases such as hydrogen and helium. As it has no solid surface, trying to land on Jupiter would be like trying to land on a cloud. Jupiter has 79 known moons!



The Planets

Distance from the Sun:

1.4 billion kilometres

One day lasts: 10.7 hours

One year lasts: 29 Earth years

Saturn is the sixth planet from the Sun. It is another gas giant. The rings of Saturn, which are made up of countless small chunks of rock and ice, make Saturn one of the most recognisable planets in the solar system. Saturn currently has 82 known moon. 53 of these moons are named.



Saturn

The diagram illustrates the solar system with the Sun on the left, glowing brightly. Several planets are shown in their respective orbits, represented by white lines. From left to right, the planets are Mercury (small grey sphere), Venus (orange sphere), Earth (blue and green sphere), Mars (red sphere), Jupiter (large orange and white banded sphere), and Saturn (orange sphere with prominent rings). A white oval callout with the word 'Saturn' and an arrow points to the planet Saturn. In the bottom left corner, there is a circular inset showing a close-up of Saturn's rings.

The Planets

Distance from the Sun:

2.9 billion kilometres

One day lasts: 17 hours

One year lasts: 84 Earth years

Uranus

Uranus is the seventh planet from the Sun. It is an ice giant – a type of gas giant planet with an icy core. Uranus is tilted so strongly to one side that its rings are tilted, too. It is still a mystery why Uranus has such a large tilt. Many astronomers think that Uranus may have been hit by something really big a long time ago, which knocked it over onto its side.



The Planets

Distance from the Sun:

4.5 billion kilometres

One day lasts: 16 hours

One year lasts: 165 Earth years

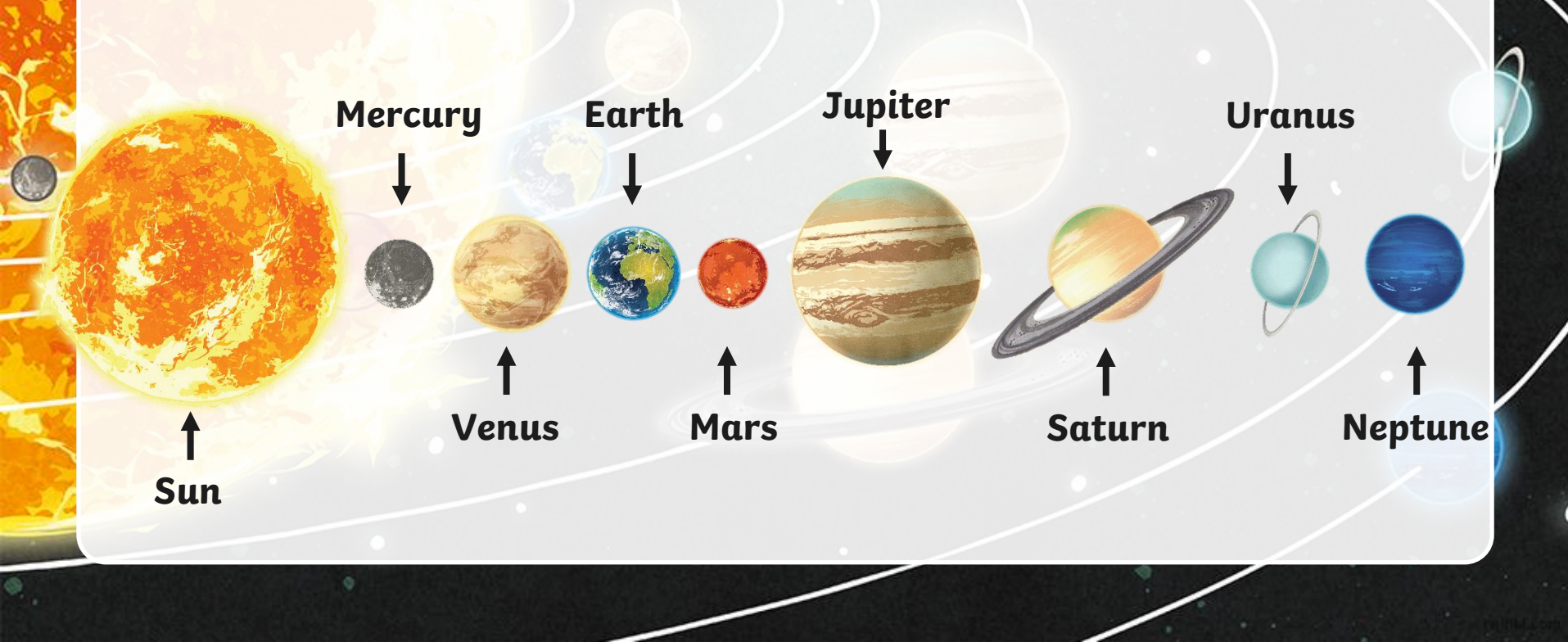
Neptune is the eighth planet from the Sun, and another ice giant. It's so far away that it is the only planet not visible from Earth without a telescope. It is an extremely cold planet with the fastest winds in the solar system. Wind speeds on Neptune have been recorded to reach as high as 1,300 miles per hour – nearly the speed of a fighter jet!



Neptune

The Planets

The Sun and these eight planets make up our solar system. There are many other objects in the solar system too, such as moons, comets, asteroids and dwarf planets. Our solar system is one of many. Scientists think that there may be tens of billions of other solar systems out there – and that's just in our galaxy!



Now it's your turn!

Take a look at these fantastic artist's impressions of our solar system/planets/space. Can you create your own piece of art that shows one of the planets (look carefully at the planets in this slideshow to see what they look like) or the whole solar system?







