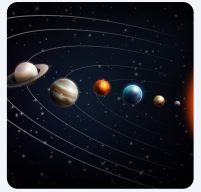# Planetary Science

Name: Date:

The planets in our solar system
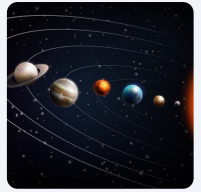
Look at the following picture and try to put the planets in the correct order.

Planetary Science

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Sort the planets from smallest to furthest distance to the Sun.

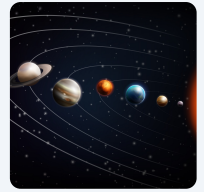| 1 | Uranus |
2	Earth
3	Venus
4	Mercury
5	Jupiter
6	Mars
7	Neptune
8	Saturn

Planetary Science

Name: Date:

! **A closer look at a planet**

Now learn more about a planet in our solar system. Read the text, then fill out the profile on the following page.

Jupiter

Jupiter is a giant planet that captures the interest of many people. It is the fifth planet from the Sun in our solar system and is the largest planet we know of. In fact, Jupiter is so big that more than 1,300 Earths could fit inside it! Its diameter is about 142,984 kilometers, making it a true giant among planets.

Jupiter is not a rocky planet like Earth. Instead, it is mostly made up of **gas** and **liquid**. The planet's composition is primarily **hydrogen** and **helium**, similar to the Sun. Deep inside Jupiter, there might be a small, rocky core, but it is surrounded by thick layers of gas and liquid.

The atmosphere of Jupiter is very interesting. It is full of swirling clouds and storms. One of the most famous features of Jupiter's atmosphere is the **Great Red Spot**, which is a giant storm that has been raging for hundreds of years. The atmosphere is mostly made of hydrogen and helium, with traces of other gases like methane and ammonia.

In our solar system, Jupiter holds the position of the fifth planet from the **Sun**. It is located between Mars and Saturn. Because of its large size and strong gravity, Jupiter plays an important role in the solar system by influencing the orbits of other objects.

Jupiter has many **moons** and a faint ring system. It has at least 79 known moons, with the four largest being **Io**, **Europa**, **Ganymede**, and **Callisto**. These are called the **Galilean moons**, named after the astronomer Galileo Galilei who discovered them in 1610. Jupiter's rings are not as noticeable as Saturn's, but they are still an important feature of the planet.
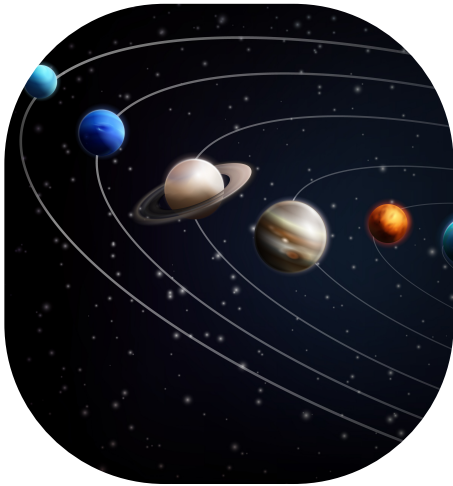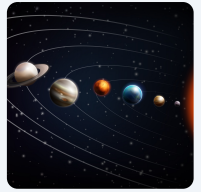
When it comes to **habitability**, Jupiter is not a place where humans or other life forms could live. The planet does not have a solid surface, and its atmosphere is full of dangerous gases and extreme weather. However, some of its moons, like Europa, are of great interest to scientists because they might have conditions that could support life.

In summary, Jupiter is the largest planet in our solar system, made mostly of gas and liquid, with a thick atmosphere and many moons. While it is not habitable for humans, it remains a fascinating subject of study and exploration.

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Name: Date:

Name

Size of the planet

Composition of the planet

Atmosphere

Position in the solar system

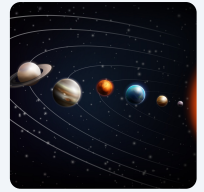**Satellites and rings**

Habitability

Planetary Science

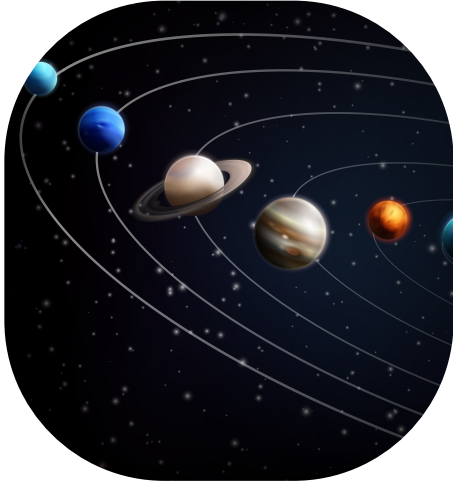Name: Date:

Additional information for teachers

Here you can find a sample solution for the profile of the planet.

Name

Jupiter

Size of the planet

Largest in the solar system, diameter of about 142,984 kilome...

Composition of the planet

Mostly gas and liquid, primarily hydrogen and helium, possible...

Atmosphere

Swirling clouds and storms, includes the Great Red Spot, mostly hydrogen and helium with traces of methane and ammonia

Position in the solar system

Fifth planet from the Sun, located between Mars and Saturn

Satellites and rings

At least 79 moons, four largest are Io, Europa, Ganymede, and Callisto (Galilean moons), faint ring system

Habitability

Not habitable for humans, no solid surface, dangerous gases, extreme weather, some moons like Europa may have conditions that could support life

Planetary Science

Name: Date:

💡 **Mnemonic to remember the order of planets**

Here is a tip how you can remember the order of planets: in the following mnemonic each word starts with the same letter as one of the planets:

my **v**ery **e**ducated **m**other **j**ust **s**erved **u**s **n**oodles

Mercury **V**enus **E**arth **M**ars **J**upiter **S**aturn **U**ranus **N**eptune