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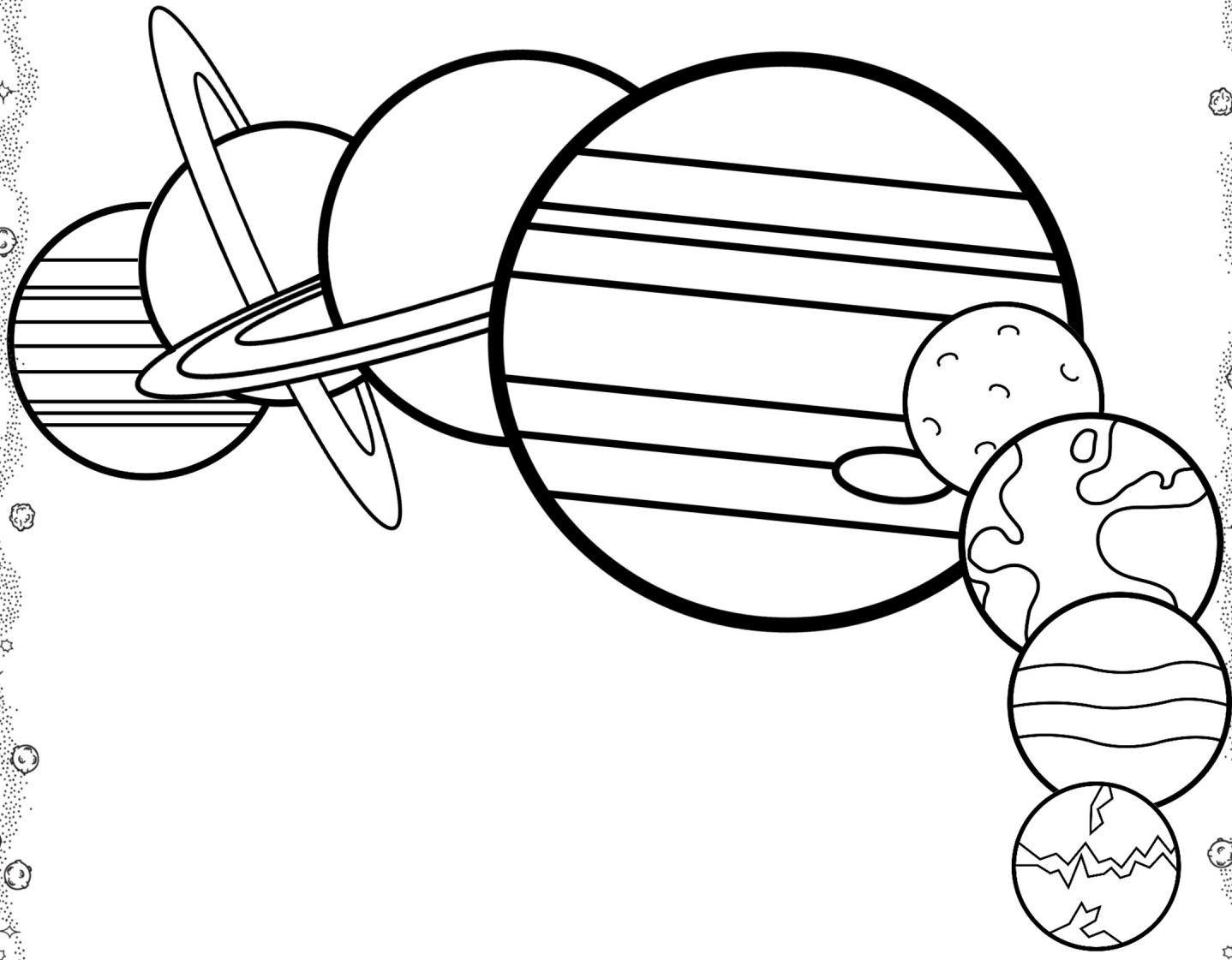
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My Solar System Book



Name _____

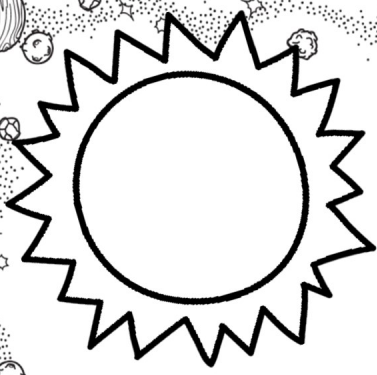
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The Sun

The sun is the star in the center of our Solar System. Our 8 planets circle, or orbit, around the sun. The sun's gravity holds the planets in their orbits. The sun is just like the other millions and millions of stars in the Galaxy. To us, it looks like a large, round, red ball only because we are much closer to the sun than to other stars. It is a great burning ball of gases. The sun gives us light and heat. The Earth would have no life at all without the energy it gets from the sun. About one million Earths could fit inside the sun.

1. The sun is a _____, not a planet.
2. Earth and the other planets orbit around the _____.
3. The sun gives us _____ and _____.
4. Without the sun, Earth would have no _____ at all.
5. The sun's _____ holds the planets in their orbits.



Mercury

Mercury is the closest planet to the sun. It is the first planet in our solar system. Because Mercury spins so slowly, it is extremely hot during the day (800°F) and is very cold at night (-300°F). One day on Mercury is about 58 Earth days long, but one year on Mercury is only 88 Earth days. Mercury is an inner planet and is like a large metal ball of iron covered with craters. There is almost no air on Mercury and no moons orbiting the planet. You can see Mercury from the Earth.

1. Mercury is the _____ planet to the sun.
2. Mercury is either very _____ or very _____.
3. One day on Mercury is _____ Earth days.
4. Mercury is an (inner or outer) planet.
5. Mercury is a (rocky or gaseous) planet.
6. There are _____ moons orbiting Mercury.

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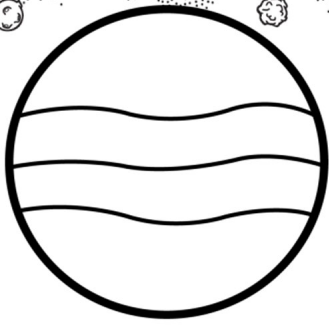
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Venus

Venus is the second planet from the sun in our Solar System. The atmosphere on Venus is like a blanket, so the heat is trapped on the surface. It is extremely hot (870°F). One day on Venus is about 243 Earth days long, and one year is 225 Earth days, so one day on Venus is longer than Venus's entire year! Venus is an inner planet and is rocky. It is almost the same size as Earth, so it is called Earth's "sister" planet. Venus has no moons and can be seen from Earth.

1. Venus is the _____ planet from the sun.
2. It is very _____ on Venus.
3. One day on Venus is _____ Earth days.
4. Venus is an (inner or outer) planet.
5. Venus is a (rocky or gaseous) planet.
6. Venus is Earth's _____ planet.
7. Venus can be seen from _____.

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Earth

Earth is the third planet from the sun in our Solar System. The temperature on Earth ranges from -129°F to 136°F . One day on Earth is 24 hours long, and one year on Earth is 365 days. Earth is the largest inner planet, and most of it is covered by water. People can live on Earth because it has the water and air that we need to survive. There are about 7.5 billion people living on Earth. The Earth has one moon, sometimes called Luna. Our moon is the 5th largest moon in the Solar System.

1. Earth is the _____ planet from the sun.
2. The temperatures on Earth are between _____ $^{\circ}\text{F}$ and _____ $^{\circ}\text{F}$.
3. One day on Earth is _____ hours long.
4. Earth is an (inner or outer) planet.
5. Earth is mostly covered by _____.
6. The Earth's moon is sometimes called _____.

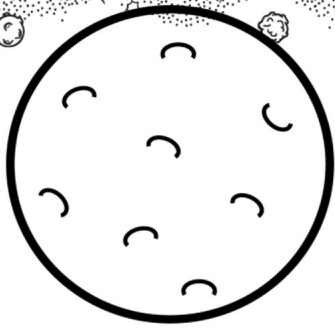
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Mars

Mars is the fourth planet from the sun in our Solar System. The temperature on Mars ranges between -195° to 70°F , so its temperatures can be like Earth's. One day on Mars is almost 25 hours, and it takes 687 Earth Days for Mars to orbit the sun. Mars is an inner planet and can be seen in Earth's night sky. Mars is covered by reddish rocks and is called the "red planet." Mars has water frozen underground and in ice caps. There are two small moons orbiting Mars.

1. Mars is the _____ planet from the sun.
2. The temperature on Mars can be like _____'s.
3. One day on Mars is _____ hours long.
4. Mars is an (inner or outer) planet.
5. Mars is a (rocky or gaseous) planet.
6. There are _____ moons orbiting Mars.

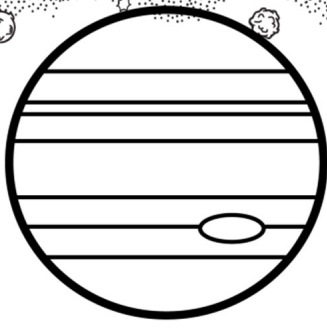
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Jupiter

Jupiter is the fifth planet from the sun in our Solar System and is our largest planet. The temperature on Jupiter's surface is about -234°F , so it is extremely cold there. However, the center of Jupiter is hotter than the sun. One day on Jupiter is only 10 Earth days, but it takes 4,330 Earth days for Jupiter to orbit the sun. Jupiter is an outer planet. As a gas giant, it has no solid surface. A giant storm on the planet has been raging for over 400 years and looks like a big red spot. There are 67 moons orbiting Jupiter.

1. Jupiter is the _____ planet from the sun.
2. The temperature on Jupiter is _____ $^{\circ}\text{F}$.
3. One day on Jupiter is _____ hours long.
4. Jupiter is an (inner or outer) planet.
5. Jupiter is a (rocky or gaseous) planet.
6. There are _____ moons orbiting Jupiter.

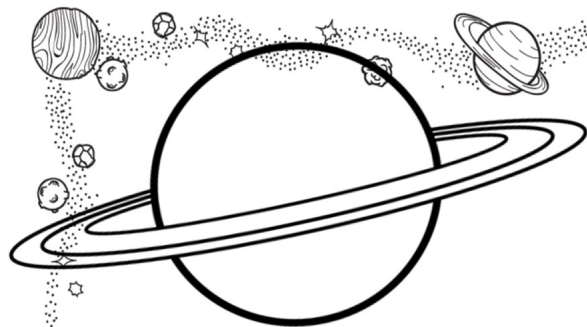
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Saturn

Saturn is the sixth planet from the sun in our Solar System. The temperature on Saturn can get as low as -300°F , so it is extremely cold there. Saturn spins fast. One day on Saturn is about 11 hours long, but one year is 10,759 Earth days. Saturn is an outer planet and a gas giant. It is known for its beautiful rings made of ice and dust. The rings are over 170,000 miles across. Saturn is not the only planet with rings. All the gas giants have rings of some kind. There are 62 official moons orbiting Saturn.

1. Saturn is the _____ planet from the sun.
2. It is extremely _____ on Saturn.
3. One day on Saturn is _____ hours long.
4. Saturn is an (inner or outer) planet.
5. Saturn's rings are made up of ice and _____.
6. There are _____ official moons orbiting Saturn.

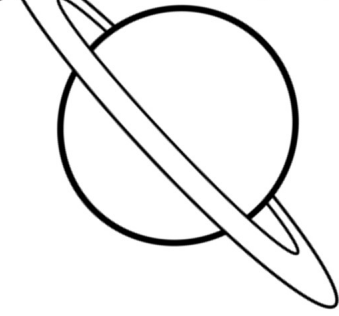
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Uranus

Uranus is the seventh planet from the sun in our Solar System. The average temperature on Uranus is -300°F , so it is extremely cold there. One day on Uranus is about 17 hours long, and one year is 30,684 Earth days. It takes Uranus a very long time to orbit the sun! Uranus is an outer planet and is an ice giant. Scientists believe that long ago Uranus was struck by large space object. The crash caused it to change direction and spin on its side. There are 27 moons orbiting Uranus.

1. Uranus is the _____ planet from the sun.
2. The average temperature on Uranus is _____.
3. One day on Uranus is _____ hours long.
4. A space object may have crashed into Uranus causing it to change directions and spin on its _____.
5. There are _____ moons orbiting Uranus.

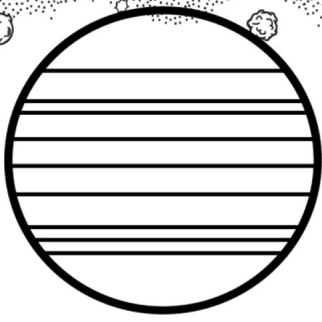
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Neptune

Neptune is the eighth planet from the sun in our Solar System. The temperature on Neptune can get as cold as -360°F . One day on Neptune is only 16 hours, but it takes 60,190 Earth days for Neptune to orbit the sun. This means Neptune has the longest year of any of the 8 planets. Neptune is an outer planet and is an ice giant. It has a giant storm just like Jupiter called the Great Dark Spot. There are 14 moons that we know of orbiting Neptune, but there could be more!

1. Neptune is the _____ planet from the sun.
2. The temperature on Neptune is _____ $^{\circ}\text{F}$.
3. One day on Neptune is _____ hours long.
4. Neptune is an (inner or outer) planet.
5. Like Jupiter, Neptune has a giant storm on it called the Great Dark _____.
6. Neptune has _____ known orbiting moons.

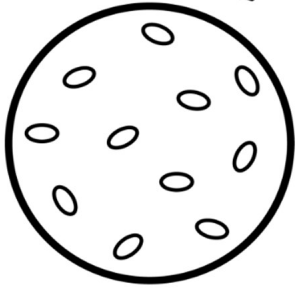
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Pluto

Pluto is a dwarf planet. In 2006, scientists changed it from a true planet to a dwarf planet because of its small size. Pluto is in the outer Solar System and is about 1/3 ice. The temperature on Pluto can get as low as -400°F , so it is extremely cold there. One day on Pluto is $6\frac{1}{2}$ Earth days, but it takes 90,588 Earth days for Pluto to orbit the sun. There are 5 moons that we know of orbiting Pluto. Pluto got its name in 1930, after an 11-year-old girl suggested it.

1. Pluto is a _____ planet.
2. Pluto is about $\frac{1}{3}$ _____.
3. The temperature on Pluto can get as low as _____ $^{\circ}\text{F}$.
4. One day on Pluto is _____ Earth days.
5. Pluto is in the (inner or outer) Solar System.
6. Pluto has _____ known moons.

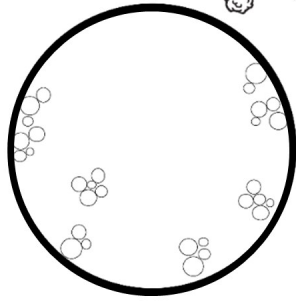
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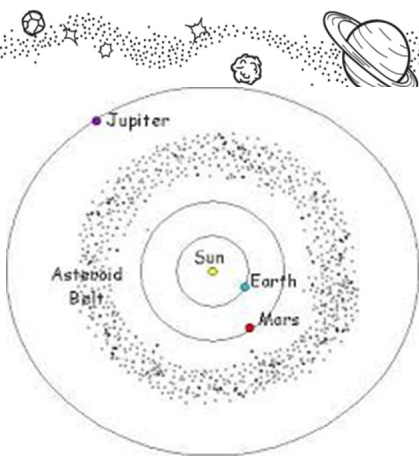
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Moons

A moon is a natural object that orbits a planet. Moons are smaller than the planet they orbit. A planet can have no moons, or it can have many. The Earth has 1 moon. Jupiter has 67 moons, the most of any planet. Each moon has its own size and orbit. The Earth's moon is the 5th biggest moon in the Solar System. One day on our moon lasts 29 earth days. We see the phases happen when the moon orbits the earth. Some of the phases are new, crescent, and full moon.

1. A moon orbits a _____.
2. The Earth's moon orbits the _____.
3. Each moon has its own _____ and orbit.
4. _____ has the most moons.
5. Phases of our moon include _____, crescent, and full moon.



Asteroids and the Asteroid Belt

An asteroid is a chunk of rock, ice, or metal in space. Asteroids orbit the sun but are smaller than planets and have less gravity. Over a million asteroids are found between Mars and Jupiter. This group of asteroids is called the asteroid belt. The asteroid belt separates the inner planets from the outer planets. Sometimes small pieces of asteroids enter the earth's atmosphere and burn up as they fall through the sky. When this happens, they are called meteors or "shooting stars."

1. An asteroid is a chunk of _____, ice, or metal.
2. The asteroid belt is between Mars and _____.
3. The asteroid belt separates the inner planets from the _____ planets.
4. A small piece of asteroid that enters the Earth's atmosphere is called a _____ or "shooting star."

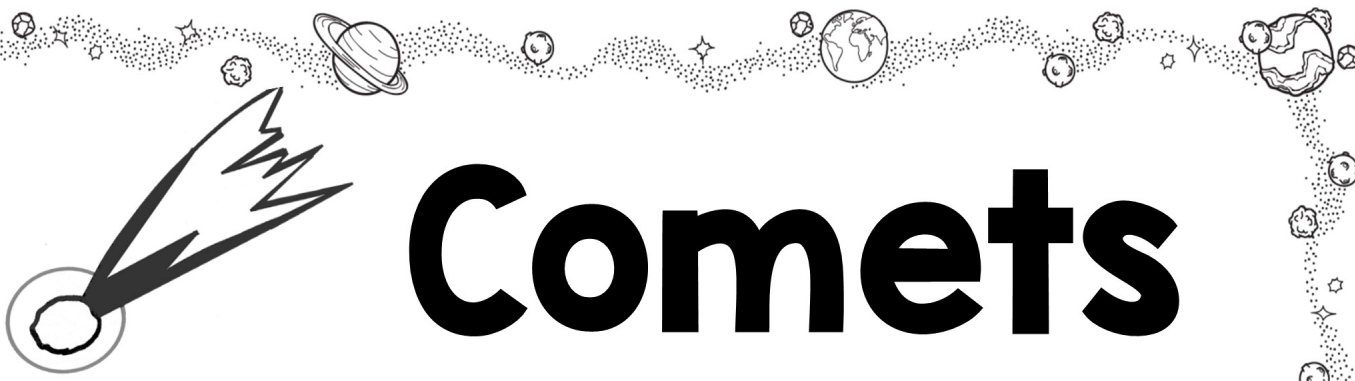
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Comets

A comet is a space object with an ice or rock center. Comets have long orbits around the sun that can last hundreds or even thousands of years. When a comet gets close to the sun, a tail of dust and frozen gases appears. The tail is made by the sun's solar winds and will always point away from the sun. Scientists have discovered over 3,000 comets in our Solar System. The most famous comet is Halley's Comet. It can be seen every 76 years. The Chinese wrote about seeing the Halley's Comet over 2,200 years ago.

1. A comet has an ice or _____ center.
2. A tail appears on a comet as it gets close to the _____.
3. Our Solar System has over _____ comets.
4. The most famous comet is _____ Comet.

