THE SUN AND THE SOLAR SYSTEM

Name the planets in their order from the sun.

1
2
3
4
5
6
7
8

The asteroid belt is between _______________ and _______________

Which planet has the most moons? About how many?_______________________________________

What are terrestrial planets? Why are they called like that?________________________________________

Which planets are gas giants?_____________________________________________________________

How was the solar system formed? Describe in a short paragraph!
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

What happens during a solar eclipse?___________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Where is the corona? How hot does it get there?_________________________________________________
__________________________________________________________________________________________

Why is the sun so important for life on Earth?__________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

What will happen to the sun in about 5 billion years?____________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Where is our solar system located in the Milky Way?_____________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

What elements is the sun made up of?____________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

In the core the sun converts ____________________________ to ____________________________

What is a solar flare?______________________________________________________________________
__________________________________________________________________________________________
THE INNER PLANETS

Write the correct word in the blank to complete the sentence, but be careful – there are more words than you need!

Mars is the ___________ planet from the sun.

Because it is like the Earth ___________ is called the Earth’s twin.

___________ has extreme temperatures, about 500° during the night and -170° at night.

Venus is the ___________ planet from the sun.

The atmosphere on Venus is made up mostly of _____________.

The largest volcano in the solar system is _____________.

The _____________ space probes made many discoveries about Mars.

Polar ice caps can be found on _____________.

It takes Mercury about _____________ to go around the sun once.

Mercury was named after the Roman _____________ of the gods.

There is almost the same _____________ on Venus as on our Earth.

Venus has a very thick _____________ so it is impossible to see the surface.

Venus is the _____________ planet in the solar system.

The _____________ of Venus is flat with a few high mountains.

Venus was named after the _____________ of beauty.

The Earth rotates once around its axis every _____________.

Life on Earth exists because there is _____________ in the atmosphere.

The _____________ layer protects us from the sun's rays.

The _____________ of the Earth is made up of liquid iron and nickel.

___________ run for thousands of kilometres on the surface of Mars.

Older astronomers thought that Mars had a system of _____________.
THE OUTER PLANETS

ANSWER THE QUESTIONS IN YOUR OWN WORDS

Jupiter has 1400 times the volume of our Earth but is only 300 times as heavy. What does this mean? What is the planet made up of?

_____________________________________________________________________________

What is the great red spot on Jupiter’s surface?

_____________________________________________________________________________

What are the names of Jupiter’s Galilean moons?

_____________________________________________________________________________

Why are there strong winds on Saturn?

_____________________________________________________________________________

Why would Saturn float in water?

_____________________________________________________________________________

Describe what Saturn’s rings look like?

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

What is the name of Saturn’s largest moon?

Explain, in short, what the Cassini mission was about?

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

What is unusual about Uranus?

_____________________________________________________________________________

How and when were most of the moons of Uranus discovered?

_____________________________________________________________________________

Why does Neptune have a bluish-green colour?

_____________________________________________________________________________

What are dwarf planets?

_____________________________________________________________________________
_____________________________________________________________________________

The largest dwarf planet is

How long does it take Pluto to go around the sun?

_____________________________________________________________________________

What happens to Pluto’s atmosphere when it gets nearer to the sun?

_____________________________________________________________________________

Ceres is a dwarf planet between ___________________ and ___________________
THE MOON

DESCRIPT THE FOUR PHASES OF THE MOON

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

COMPLETE THE FOLLOWING TEXT WITH THE WORDS FORM THE BOX!

distance - rotate - diameter - closest - axis - satellite - pointed - astronauts - earth - orbit - dark

The moon is the Earth’s natural ________________ and the object in space that is ________________ to us. It’s ________________, is only one fourth of the Earth’s. The moon moves around the ________________ at an average ________________ of about 400,000 km. It takes the moon about 28 days for one complete ________________ and about the same time to ________________ around its own ________________. That means that the same side of the moon is always ________________ at us. Only ________________ have seen the ________________ side of the moon.

ANSWER THE FOLLOWING QUESTIONS!

Why are the dark areas of the moon called “mare”? What does this mean?

____________________________________________________________________________________________

How was our moon formed?

____________________________________________________________________________________________

____________________________________________________________________________________________

What happens when the moon pulls at the Earth with its gravity?

____________________________________________________________________________________________

____________________________________________________________________________________________

FILL IN THE MISSING WORDS

1. The highest mountains on the moon are almost as high as ________________.
2. In 1969 the American ________________ spacecraft landed on the moon and ________________ was the first man to set foot on the moon.
3. The moon has no ________________ so there is nothing to breathe.
4. Temperatures can be very extreme. They reach from about ________________ on the sunlit side to about ________________ on the dark side.
5. People could jump very far on the moon because ________________ is only about one sixth of the Earth’s.
COMETS AND ASTEROIDS

Complete the text by filling in the correct word from the list

A comet is an object in space that _______________ around the sun. People first thought that they were only strange changes of _______________ but Newton proved that they were planets with _______________.

A comet is made up of an inner part called _______________ and a cloud around it made up of ice, _______________ and other gases. Scientists call it a dirty _______________.

When a comet _______________ the sun, the icy parts _______________ and the comet gets brighter and brighter. Their _______________, which always point away from the sun, can _______________ into space for millions of km. Some comets have short tails, so that they are almost _______________.

Comets have _______________ orbits and they appear at different intervals. Some of them _______________ every 3 or 4 years and others have periods of 2,000 years and more.

Which of the statements about asteroids is TRUE or FALSE. Write a correct sentence next to the false ones.

Asteroids are rocks that move around the sun between Venus and Mercury. ______

Many asteroids have also been found between the Earth and Venus. ______

NASA sends spaceships to asteroids when they are close to Earth. ______

Asteroids that may hit the Earth are called comets. ______

Most of them burn up when they hit the Earth. ______

About 650 million years ago a large asteroid crashed into the Earth. ______

Scientists think that dinosaurs died out because a big asteroid hit the Earth. ______
### Match these words by putting the correct letter to the explanations at the right.

<table>
<thead>
<tr>
<th>A</th>
<th>float</th>
<th>when something goes away so that you can't see it any more</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>launch</td>
<td>to come very close to something</td>
</tr>
<tr>
<td>C</td>
<td>probe</td>
<td>the gas that animals and people produce when they breathe out</td>
</tr>
<tr>
<td>D</td>
<td>interfere</td>
<td>to move very slowly in the air or in water</td>
</tr>
<tr>
<td>E</td>
<td>organic</td>
<td>when the moon is between the sun and the Earth</td>
</tr>
<tr>
<td>F</td>
<td>approach</td>
<td>old</td>
</tr>
<tr>
<td>G</td>
<td>path</td>
<td>to move around a planet in a circle</td>
</tr>
<tr>
<td>H</td>
<td>orbit</td>
<td>the upper atmosphere of the sun</td>
</tr>
<tr>
<td>I</td>
<td>eclipse</td>
<td>a gas that is lighter than air and is used to fill balloons and make them rise</td>
</tr>
<tr>
<td>J</td>
<td>ice caps</td>
<td>something living</td>
</tr>
<tr>
<td>K</td>
<td>disappear</td>
<td>grey or white object in the sky that has very small water drops in it</td>
</tr>
<tr>
<td>L</td>
<td>ancient</td>
<td>a small spaceship that is sent to the surface of a planet by a larger one</td>
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<tr>
<td>M</td>
<td>helium</td>
<td>the inner part of a planet</td>
</tr>
<tr>
<td>N</td>
<td>terrestrial</td>
<td>the route along which something moves</td>
</tr>
<tr>
<td>O</td>
<td>carbon dioxide</td>
<td>to start a spacecraft</td>
</tr>
<tr>
<td>P</td>
<td>cloud</td>
<td>the line from one side of a circle to the other</td>
</tr>
<tr>
<td>Q</td>
<td>core</td>
<td>the heat, light and other forms of energy produced by an object</td>
</tr>
<tr>
<td>R</td>
<td>diameter</td>
<td>Earth-like</td>
</tr>
<tr>
<td>S</td>
<td>corona</td>
<td>places near the poles of a planet where water freezes</td>
</tr>
<tr>
<td>T</td>
<td>radiation</td>
<td>get in the way of something</td>
</tr>
</tbody>
</table>
**Match these words by putting the correct letter to the explanations at the right.**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>solar</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>asteroid</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>atmosphere</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>gravity</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>surface</td>
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<td><strong>F</strong></td>
<td>axis</td>
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<tr>
<td><strong>G</strong></td>
<td>dust</td>
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<td><strong>H</strong></td>
<td>oxygen</td>
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<tr>
<td><strong>I</strong></td>
<td>astronomer</td>
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<tr>
<td><strong>J</strong></td>
<td>melt</td>
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<tr>
<td><strong>K</strong></td>
<td>telescope</td>
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<tr>
<td><strong>L</strong></td>
<td>vehicle</td>
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<tr>
<td><strong>M</strong></td>
<td>equator</td>
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<tr>
<td><strong>N</strong></td>
<td>methane</td>
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<td><strong>O</strong></td>
<td>tremendous</td>
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<tr>
<td><strong>P</strong></td>
<td>path</td>
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<td><strong>Q</strong></td>
<td>tides</td>
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<td><strong>R</strong></td>
<td>calculate</td>
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<td><strong>S</strong></td>
<td>prove</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>meteorite</td>
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</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>gas that is in the air and that we need to breathe</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>the line around which a planet rotates</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>track, route</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>a person who studies the stars and the sky</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>everything that has to do with the sun</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>an instrument that makes small faraway objects look bigger</td>
</tr>
<tr>
<td><strong>G</strong></td>
<td>the power that pulls you to the ground</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>to show that something is true</td>
</tr>
<tr>
<td><strong>I</strong></td>
<td>an object that can move on wheels</td>
</tr>
<tr>
<td><strong>J</strong></td>
<td>the gases that are around a planet</td>
</tr>
<tr>
<td><strong>K</strong></td>
<td>very very big</td>
</tr>
<tr>
<td><strong>L</strong></td>
<td>the line that goes around the middle of a planet</td>
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<tr>
<td><strong>M</strong></td>
<td>the rising and falling of sea levels</td>
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<tr>
<td><strong>N</strong></td>
<td>to make a hard object hot and turn it into a liquid</td>
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<tr>
<td><strong>O</strong></td>
<td>to find out how long something will take</td>
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<tr>
<td><strong>P</strong></td>
<td>rocks that travel through space and sometimes crash into other planets</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>very small particles of dirt</td>
</tr>
<tr>
<td><strong>R</strong></td>
<td>part of an asteroid or comet that crashes into the Earth</td>
</tr>
<tr>
<td><strong>S</strong></td>
<td>a gas that you cannot see or smell; when you burn it it gives off energy</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>the hard top part of a planet</td>
</tr>
</tbody>
</table>
CROSSWORD

Across
2. the power that keeps you on the ground
3. the planet closest to the sun
6. a moon that moves around a planet
8. to move around an object in a circle
9. if you can see something
13. to get in the way of someone or something

Down
1. a piece of metal that can attract iron or steel
4. a crash
5. if you find something for the first time
7. if you come close to something
10. if you get air into your lungs from your nose
11. the whole area outside the Earth where the sun, the stars and the planets are
12. the inner part of a planet or a comet
14. line of light that comes from the sun to Earth
**THE SOLAR SYSTEM - EXERCISES**

**CROSSWORD**

**Across**

1. what we know about something  
3. to move around your own axis  
6. this planet is often called the Earth’s twin  
7. one of the gas giants  
9. a person who studies the stars, the sky and the planets  
11. a flat circle  
14. a very small spaceship that is sent to the surface of a planet by a larger spaceship  
15. material that comes out of a volcano  
16. the outer part of the sun’s atmosphere

**Down**

2. the line from one side of a circle to another  
4. everything that is earth-like  
5. rocks that travel through space  
8. very, very big  
10. when the moon is between the Earth and the sun  
12. everything that has to do with the moon  
13. to find an answer to problems
There are 12 words that have something to do with the solar system. See if you can find them!
There are 12 words that have something to do with the solar system. See if you can find them!

C M W B S A N T B C
T I D E I R J Z B O
V L Q X R J A V Q M
A K R J S P H E R E
G Y O X U D M Q O T
R W T E Z P D U T B
A A F L X R I B A X
V Y D L R O Z T T T
I U N I V E R S E T
T K U P A Z Y B D R
Y H O S B T A Z I X
S A T E L L I T E T
I D V C A N Y O N O
C O L L I S I O N B
D K P S P R O B E W
# PLANETS - SUMMARY

Complete the table with the most important facts!

<table>
<thead>
<tr>
<th></th>
<th>Main Facts (Distance from the sun, rotation, orbit etc..)</th>
<th>Atmosphere</th>
<th>Structure and Surface</th>
<th>Discovery and Exploration</th>
<th>Other important facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
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<tr>
<td>Venus</td>
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<tr>
<td>Earth</td>
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<td>Mars</td>
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<td>Neptune</td>
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