

Understanding words - 1

Words are the building blocks we use to communicate with others. It is important that we understand what they mean and that we know some ways to work out their meanings in different sentences.

Read the report.

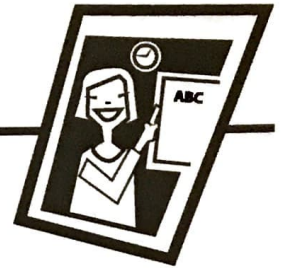
Jupiter

1. Our solar system is believed to be around 4.5 billion years old. It consists of eight planets which orbit the Sun. The planets, in order from the Sun, are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
2. Jupiter is the fifth and largest planet in our solar system. Its volume is 1321 times that of Earth. It was named after the Roman king of the gods, which is appropriate since it is the king of the planets—a gas giant! Its diameter is about 143 000 km—that is over 11 times greater than the Earth's diameter!
3. Because it is so far from the Sun, approximately 750 000 000 kilometres, Jupiter is also very cold. The planet is surrounded by three layers of clouds, each made of different substances! Scientists were surprised to find that lightning occurs within these clouds, much the same as lightning occurs during a thunderstorm here on Earth. Jupiter is famous for the 'Great Red Spot', a storm that has been raging for more than 350 years. It can be seen just below Jupiter's equator and looks rather small on the face of the planet. But, just remember how big Jupiter is; the Red Spot is actually equivalent in size to three planet Earths!
4. Jupiter is a beautiful planet. Photographs taken on unmanned space missions leave most people awestruck. It has very distinctive bands of colour. It is believed that these coloured bands are caused by a combination of very strong winds travelling at several hundred kilometres per hour and by Jupiter's high rotational speed. It takes 10 Earth hours for one full rotation of Jupiter.
5. This amazing planet does not have a solid surface. Instead, it is believed to have a small rocky core at its centre, larger than Earth, surrounded by hydrogen and helium gas. It has also been found to have very thin rings. These cannot be seen by even the most powerful telescope on Earth. The rings were only discovered from photographs taken on space missions. The rings are made up of dust particles caused by Jupiter's moons.
6. Jupiter is surrounded by the most number of moons of any planet in the solar system—a total of 63. Some of these are unnamed, but four of them are considered to be quite significant! The first of these moons is called Io. Io has many active volcanoes and lakes of molten lava can be clearly seen on space expeditions. The second moon is Europa and it is believed to have an ocean under its icy surface, which leads to speculation that there may be some form of life present there. The third and largest moon, Ganymede, is larger than Pluto and Mercury and has large, smooth craters present. The fourth moon is Callisto and is also believed to have an ocean underneath its cold surface. Because of its large size and numerous moons, Jupiter and its surrounding bodies almost look like a small scale solar system on its own.



Understanding words

Learning about the skill



Learn how you can work out the meaning of words.

- First find and underline the word in the text.
- Read the sentence the word is in—this will be very helpful.
- Think about the other words in the sentence to find out what clues they give you.
- If you are still not sure, read the sentences before and after that one and the whole paragraph if you need to.
- Always check all the possible answers before choosing one.

1. Find and underline the word **present** in paragraph 6.

Does it mean:

- (a) a gift?
- (b) hiding?
- (c) right now?
- (d) existing?

Choosing the best answer

- (a) 'Gift' is another word for a present if we are talking about Christmas or birthday presents. But we are not talking about presents in this way, so this is not a good answer.
- (b) The life form is unable to be seen at this stage, but it is unlikely that it would be hiding. This answer seems unlikely.
- (c) The life form is possibly there right now, but in the way present is used in the sentence, it doesn't really make sense. So this isn't the best answer.
- (d) The text talks about some form of life present or being there. So existing would make sense in the sentence and is the best answer.

2. Find and underline the word **consists** in paragraph 1.

Does it mean:

- (a) outer space?
- (b) is part of?
- (c) includes?
- (d) belongs to?

Choosing the best answer

- (a) The text is talking about the solar system which is outer space, but the word consists is talking about what makes up the solar system. So this answer is not likely.
- (b) The solar system couldn't possibly be part of each planet, it is the other way around. So this answer is not a good answer.
- (c) The paragraph is talking about what is included to make up the solar system. So this seems the best answer, but you must check all answers.
- (d) The planets do belong to the solar system, but this doesn't make sense in the context of the sentence. This doesn't seem like a good answer.

Understanding words

Practice page



Use similar strategies to those on page 5 to practice the skill.
(Clues are given to help you!)

1. Find and underline the word **particles** in paragraph 5.

Does it mean:

- (a) a type of dust?
- (b) a large amount of?
- (c) very small bits?
- (d) small moons?

The best answer is .

2. Find and underline the word **equivalent** in paragraph 3.

Does it mean:

- (a) holds?
- (b) different from?
- (c) like?
- (d) equal?

The best answer is .

3. Read these explanations about the meaning of the phrase **leads to speculation** and decide which one is the best.

- (a) makes scientists think
- (b) many people like to look carefully
- (c) everyone is saying
- (d) taking a gamble

The best answer is .

4. Find and underline the word **considered** in paragraph 6.

Write the sentence using another word with a similar meaning.

Think!
The word before **particles** gives you a clue.

Think!
Try each answer in the sentence to see which one makes the most sense.

Think!
Find the phrase in paragraph 6. The end of the sentence should help.

Think!
Read the sentence and think about its meaning. Try a few different words before making a decision.

Understanding words



On your own

Think about the strategies you have been using and work out these answers.

1. What does the word **numerous** in paragraph 6 mean?
 - (a) many
 - (b) numbers
 - (c) something funny
 - (d) few
2. What does the word **distinctive** in Paragraph 4 mean?
 - (a) hidden
 - (b) different
 - (c) hard to see
 - (d) visible

The best answer is .

The best answer is .

3. Explain what is meant by this phrase from paragraph 6—**space expeditions**.

4. Explain what is meant by the phrase **a storm that has been raging**, from paragraph 3.

5. Explain why the term **believed** is used in paragraph 1 to describe the age of the solar system.

6. Draw a diagram to show the meaning of **orbit** (Paragraph 1).