

## English Learning Pack - Page 1

### Planets in the solar system

A solar system is a sun and the planets that move around it. Our solar system contains 8 planets. Not all have been explored fully, but scientists and experts have managed to piece together a range of facts to help us understand them.

#### Mercury

Mercury is the smallest planet in the solar system, only a little bigger than earth's moon. It is the closest to the sun but not the hottest - and it's still a staggering 57 million kilometres away. It takes around 88 earth days to complete its round journey or 'orbit' around the sun (which takes earth a year). This is the shortest time of any planet in the solar system. However, one full rotation (which is how we measure a day on earth) lasts almost 59 earth days.

#### Venus

Venus has extreme temperatures and acidic clouds, which makes the existence of life there unlikely. It is the hottest of the planets, with the surface temperature of around 460 degrees C. A year for Venus takes 224.7 earth days, and a day lasts almost the same amount of time: 243 earth days. Unusually, Venus's rotation is in the opposite direction to the earth's.

#### Earth

The 5th largest planet in the solar system, our planet is the only one we know is inhabited by living things and the only one we know has liquid water. Earth is around 150 million kilometres from the sun and takes 365 days to orbit it.

#### Mars

Mars is home to polar ice caps, extinct volcanoes and canyons. This planet, the 4th from the sun, is well explored by humans. A day on Mars lasts just over 24 hours and it takes the planet 687

earth days to orbit the sun. It is known as the Red Planet due to the rusty fragments of iron in its soil.

#### Jupiter

By far the largest planet in the solar system, Jupiter is twice as big as all the other planets combined. A day lasts about 10 earth hours, but a year takes about 12 earth years. Jupiter is made mostly of hydrogen and helium: it does not have a solid surface so spacecraft would be unable to land. Its extreme pressures and temperatures would also destroy any vehicle.

#### Saturn

Similar to Jupiter, Saturn is mainly made up of hydrogen and helium. Perhaps its most famous feature is its many rings, which are made of ice and rock. Saturn is believed to have a total of 62 moons. Although Saturn itself cannot support life similar to that on earth, some of its moons are believed to have conditions that may support it. A year on Saturn lasts around 29.5 earth years and a day lasts almost 11 hours.

#### Uranus

Uranus is 4 times wider than earth. It takes about 84 earth years to complete a full orbit of the sun, and about 17 hours to rotate once. Similar to Venus, Uranus's rotation is in a direction opposite to that of most planets. Uniquely, Uranus rotates on its side.

#### Neptune

Almost 30 times as far away from the sun as earth is, Neptune is the most distant planet in the solar system. Neptune, which was not discovered until 1846, is not visible to the naked eye from earth. It takes about 16 earth hours to rotate once, but around 165 earth years to orbit the sun, meaning it has so far completed only one rotation since its discovery. It has 13 moons and six known rings. Due to its icy properties, it would not be able to support life as we know it.

**Read the sentences and choose the correct word or words to fill the gap.**

Our Solar system contains \_\_\_\_\_ planets.

Not all have been \_\_\_\_\_ fully, but scientists and experts have managed to piece together a range of facts to help us understand them.

Mercury is the smallest planet in the Solar system, only a little bigger than Earth's \_\_\_\_\_.

It is the \_\_\_\_\_ to the Sun, but not the hottest – and it's still a staggering 57 million kilometres away.

Venus has extreme temperatures and \_\_\_\_\_ clouds, which make the existence of life there unlikely.

Unusually, Venus's rotation is in the \_\_\_\_\_ direction to Earth's.

A day on Mars lasts just over 24 hours, and it takes the planet 687 Earth days to \_\_\_\_\_ the Sun.

It is known as the 'red planet' due to the rusty fragments of \_\_\_\_\_ in its soil.

A day lasts about \_\_\_\_\_ Earth hours, but a year takes about 12 Earth years.

Jupiter is made mostly of hydrogen and helium: it does not have a solid surface, so \_\_\_\_\_ would be unable to land.

Saturn is believed to have a total of \_\_\_\_\_ moons.

It takes about 84 Earth years to complete a full orbit of \_\_\_\_\_, and about 17 hours to rotate once.

Almost 30 times as far away from the Sun as Earth is, \_\_\_\_\_ is the most distant planet in the Solar system.

It takes about 16 Earth hours to rotate once, but around 165 Earth years to orbit the Sun, meaning it has so far completed only one rotation since its \_\_\_\_\_.

Due to its icy \_\_\_\_\_, it would not be able to support life as we know it.

**Label the information with the correct planet.**

closest planet to the sun	
the largest planet in the solar system	
has polar ice caps, extinct volcanoes and canyons	
made up of hydrogen and helium	
most distant planet in the solar system	
four times wider than Earth	

**Label the information with the correct planet.**

takes 84 years to orbit the Sun	
62 moons	
takes 687 days to orbit the Sun	
has liquid water	
called the 'red planet'	
some moons could support life	

**Label the information with the correct planet.**

has 79 moons	
rotates in the opposite direction to Earth	
has 13 moons	
discovered in 1846	
rotates on its side	
rings made of ice and rock	

**Look at *Planets in the solar system*. Number the statements from 1 to 5 to show the order they occur in the text. Look at the first line of each paragraph to help you.**

The fifth largest planet in the Solar system, our planet is the only one we know is inhabited by living things and the only one we know has liquid water.

By far the largest planet in the solar system, Jupiter is twice as big as all of the other planets combined.

Similar to Jupiter, Saturn is mainly made up of hydrogen and helium.

Mercury is the smallest planet in the Solar system, only a little bigger than Earth's moon.

Almost 30 times as far away from the Sun as Earth is, Neptune is the most distant planet in the Solar system.

**Look at the 'Saturn' section in *Planets in the solar system*. Number the statements from 1 to 5 to show the order they occur in the text.**

A year on Saturn lasts around 29.5 Earth years and a day lasts almost 11 hours.

Similar to Jupiter, Saturn is mainly made up of hydrogen and helium.

Although Saturn itself cannot support life similar to that on Earth, some of its moons are believed to have conditions that may support it.

Saturn is believed to have a total of 62 moons.

Perhaps its most famous feature is its many rings, which are made of ice and rock.

**Look at *Planets in the solar system*. Number the statements from 1 to 5 to show the order they occur in the text.**

However one full rotation (which is how we measure a day on Earth) lasts almost 59 Earth days.

A year on Saturn lasts around 29.5 Earth years and a day lasts almost 11 hours.

Earth is around 150 million kilometres from the Sun and takes 365 days to orbit it.

A year for Venus takes 224.7 Earth days and a day lasts almost the same amount of time: 243 Earth days.

Jupiter is made mostly of hydrogen and helium: it does not have a solid surface, so spacecraft would be unable to land.

1 Add **brackets** to the sentence below.

She finally came to my party three hours late and gave me the biggest hug!

2 Add a **semi colon** to the sentence below.

I went to the shoe shop today I bought loads of trainers.

3 Add a **dash** to the sentence below.

The chocolate cake was sitting on the counter top yummy!

4 Add a **colon** to the sentence below.

My P.E bag has a pair of trainers, black shorts, warm jogging bottoms and a plain t-shirt.

5 Add **brackets** to the sentence below.

Blue my favourite colour is the colour of our school uniform.

6 Add a **dash** to the sentence below.

I need to pass my test it's worth 90% of my final grade.

1 Complete the sentence by adding the correct suffix to the word type given.

You need to (pollen) \_\_\_\_\_  
the tomatoes.

2 Complete the sentence by adding the correct suffix to the word type given.

There's no need to (terror)  
\_\_\_\_\_ the poor boy!

3 Complete the sentence by adding the correct suffix to the word type given.

You need to (length) \_\_\_\_\_  
the dress if you don't want it that  
short.

4 Complete the sentence by adding the correct suffix to the word type given.

Why would you (glory) \_\_\_\_\_  
that kind of behaviour?

5 Complete the sentence by adding the correct suffix to the word type given.

You need to (class) \_\_\_\_\_  
these shapes according to their  
properties.

6 Complete the sentence by adding the correct suffix to the word type given.

Those trousers are very tight. You  
need to (elastic) \_\_\_\_\_  
the waist so that they fit!

**These questions are about *Planets in the solar system*.**

Look at paragraph one. Find and copy two words that suggest that some of the world's most knowledgeable people are involved in space exploration.

\_\_\_\_\_

Look at the 'Mercury' section. Find and copy a word that suggests that Mercury is turning all the time.

\_\_\_\_\_

Look at the 'Venus' section. Find and copy a word that suggests that there is something odd about how Venus rotates.

\_\_\_\_\_

Look at the 'Earth' section. Find and copy a word that suggests that there are living things on Earth.

\_\_\_\_\_

Look at the 'Mars' section. Find and copy a word that suggests that Mars's volcanoes are no longer active or erupting.

\_\_\_\_\_

Look at the 'Saturn' section. Find and copy a word that suggests that Saturn is very much like Jupiter.

\_\_\_\_\_

Look at the 'Uranus' section. Find and copy a word that suggests that Uranus does something that no other planet does.

\_\_\_\_\_

Look at the 'Neptune' section. Find and copy a word that suggests that Neptune has icy features.

\_\_\_\_\_

Circle the correct answer for each of the following questions.

Which planet takes 88 Earth days to orbit the Sun?

- |         |      |         |         |
|---------|------|---------|---------|
| Mercury | Mars | Neptune | Jupiter |
|---------|------|---------|---------|

Which is the fourth planet from the Sun?

- |       |         |         |      |
|-------|---------|---------|------|
| Venus | Neptune | Jupiter | Mars |
|-------|---------|---------|------|

Which is the most distant planet from the Sun in the solar system?

- |      |         |        |         |
|------|---------|--------|---------|
| Mars | Jupiter | Saturn | Neptune |
|------|---------|--------|---------|

Which planet is four times wider than Earth?

- |         |        |        |         |
|---------|--------|--------|---------|
| Jupiter | Saturn | Uranus | Neptune |
|---------|--------|--------|---------|

Which of the following is the only known planet with liquid water?

- |       |       |      |         |
|-------|-------|------|---------|
| Venus | Earth | Mars | Jupiter |
|-------|-------|------|---------|

How many planets are there in our solar system?

- |     |       |       |      |
|-----|-------|-------|------|
| six | seven | eight | nine |
|-----|-------|-------|------|

Which of the following is known as the 'red planet'?

- |         |       |      |        |
|---------|-------|------|--------|
| Mercury | Venus | Mars | Saturn |
|---------|-------|------|--------|

Which planet has 79 moons?

- |         |      |        |         |
|---------|------|--------|---------|
| Mercury | Mars | Uranus | Jupiter |
|---------|------|--------|---------|

Which planet rotates on its side?

- |       |         |         |        |
|-------|---------|---------|--------|
| Earth | Neptune | Jupiter | Uranus |
|-------|---------|---------|--------|

Which planet rotates in the opposite direction to Earth?

- |         |       |      |         |
|---------|-------|------|---------|
| Mercury | Venus | Mars | Jupiter |
|---------|-------|------|---------|

**1** Draw a line to match the **prefix** to the correct word.

Prefix	Word
dis	play
re	approve
over	behave
mis	charge

**2** Draw a line to match the **prefix** to the correct word.

Prefix	Word
de	appear
over	direct
re	take
dis	value

**3** Draw a line to match the **prefix** to the correct word.

Prefix	Word
mis	crease
dis	analyse
over	cover
de	judged

**4** Draw a line to match the **prefix** to the correct word.

Prefix	Word
ir	tract
de	septic
over	lap
anti	rational

**5** Draw a line to match the **prefix** to the correct word.

Prefix	Word
mis	legal
il	mature
im	use
re	laid

**6** Draw a line to match the **prefix** to the correct word.

Prefix	Word
over	active
in	appear
de	activate
dis	crowd

1 Underline the **relative clause** in each sentence.

The man, who was reading a book, suddenly looked at me.

2 Underline the **relative clause** in each sentence.

The pillow, that was filled with feathers, was very uncomfortable.

3 Underline the **relative clause** in each sentence.

The dress, which was sleeveless, was half price!

4 Underline the **relative clause** in each sentence.

The singer, who was part of a group, decided to set off on her own.

5 Underline the **relative clause** in each sentence.

The boy, whose trousers were far too big, kept following me home.

6 Underline the **relative clause** in each sentence.

The magazine, that was on the table next to me, looked very grubby.