



Searching for Aliens

Why is oxygen so important?

- Nearly all animals on Earth need to breathe oxygen to live.
- Plants and some bacteria produce oxygen so scientists think it could be a sign of life.

Photo: Could there be oxygen on exoplanets?

Could a Telescope Search for Aliens?

Is there alien life out in space? A new telescope from NASA could help find it!

NASA has been building a new telescope, called the James Webb Space Telescope. Scientists think it could help them search for signs of alien life!

They are looking at exoplanets. These are planets which **orbit** a star other than our Sun.

So far, all the exoplanets we have found are a long way away. They are too distant to send astronauts or spacecraft to them.

Researchers hope the new telescope will help them find out if there are aliens on these planets!

It should be able to find out if they have oxygen on them. Oxygen is a gas. On Earth, nearly all animals need to breathe oxygen to live.

It's also produced by plants and some **bacteria**. This means if there is oxygen on a planet, there might be living things as well.

These aliens probably won't be green people! Instead, they might be tiny bacteria.

Scientists say that finding oxygen doesn't mean there definitely is alien life.

"We don't know if life is the only cause of oxygen in an **atmosphere**," NASA scientist Edward Schwieterman said.

The telescope can do more than search for aliens! It can study light from billions of **light years** away. This will help scientists learn more about what happened at the start of the universe.

Glossary

orbit	To travel around a star, sun or moon.
bacteria	Tiny living organisms you can only see through a microscope.
atmosphere	The gases which surround a planet.
light years	The distance light travels in one year, about 6 trillion miles.

Questions

1. 'They are too distant to send astronauts or spacecraft to them.'

Tick the word or phrase which is closest in meaning to 'distant' in this sentence.

- ☐ cold
- ☐ difficult
- ☐ dangerous
- ☐ far away

2. Find two things listed which produce oxygen.

1. _____

2. _____

3. Find one reason why scientists might be excited by this telescope.

4. 'Scientists say that finding oxygen doesn't mean there definitely is alien life.'

Tick the word which is closest in meaning to 'definitely' in this sentence. .

- ☐ certainly
- ☐ maybe
- ☐ possibly
- ☐ probably

5. Do you think scientists will ever find aliens? Explain your answer.

6. Summarise this news story in 15 words or fewer.

