



Two Missions to Venus

How does Venus compare to Earth?

- Venus is sometimes known as Earth's twin. It is our closest planet and is of a similar size.
- However, it has a **toxic** atmosphere and an extremely hot surface.
- One day on Venus lasts 243 Earth days but it takes only 225 Earth days to travel around the Sun, making its year shorter than a day!

NASA has announced two 'Discovery' missions that aim to learn more about our nearest planet, Venus.

NASA says that it will launch the two missions to Venus between 2028 and 2030. They will explore the **atmosphere** and the **geology** of the planet.

This will be the first time that NASA has been to Venus in 30 years.

The first mission is called DAVINCI+. This mission is going to test the atmosphere of Venus to see how it formed and changed. A probe will be lowered through the atmosphere to see if it can measure the gases. This might give them clues as to how Venus became so hot.

The other mission, VERITAS, will measure the geology of the planet. It will use a radar to scan the surface of the planet. This will allow scientists to learn more about if there are volcanoes still active on Venus.

Scientists at NASA are very excited to learn more about how Venus has become the kind of planet it is. It is our nearest neighbour

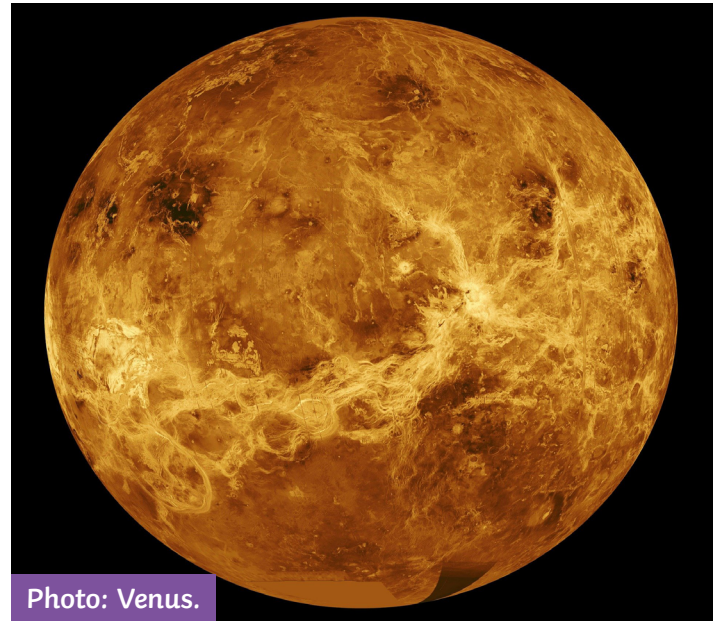


Photo: Venus.

and scientists think it could have once had a climate more like Earth's.

Despite this, at some point it has become the hottest planet in our Solar System even though it is the second closest to the Sun. Venus has a surface temperature of around 460 degrees Celsius. It is so hot that even lead would melt in Venus' atmosphere.

Glossary

toxic	Poisonous
geology	Science that looks at the structure of a planet like its rocks.
atmosphere	The gases that surround a planet.

Reflect

Why do humans want to explore other planets?



Questions

1. Which of the NASA missions will explore Venus' atmosphere?

2. Do you think humans will ever travel to Venus? Explain your answer.

3. Tick to show whether the statement is a fact or an opinion.

	Fact	Opinion
NASA has not been to Venus in 30 years.		
Venus is the most important planet to explore.		
NASA needs to explore our Solar System.		
Venus is the closest planet to Earth.		

4. Summarise the key information in the article in 20 words or fewer.