



THE WEEK Junior

Takeover

Mars Mission

History-Making Rover Due to Land on Mars

The largest vehicle ever sent to explore Mars' surface is set to arrive at the **Red Planet** on 18 February. Perseverance, which is a rover designed by US space agency NASA, is on board the third of three spacecraft that have visited Mars this month. The other two, sent by the United Arab Emirates and China, are still **orbiting** the planet, although the Chinese probe will touch down on the surface later this year.

One of the most difficult parts of any journey to Mars is the landing. Around half of all the spacecraft that have ever visited the planet have crashed, and scientists have to deal with a delay in communication between Earth and their distant **probes**. The spacecraft carrying Perseverance will need to slow down from a speed of 13,000mph before it can safely land on the planet.

If it touches down successfully, Perseverance will be able to start working on its mission. Scientists hope it will help them find out whether life has ever existed on Mars before. The rover, which is around the size of a car and has six wheels, will use a 2.1 metre-long robotic arm to scoop up rock and soil samples. These can then be sealed in tubes and left for future missions to

collect and bring back to Earth for analysis. Perseverance also has two microphones and 23 cameras which it will use to share information about the planet with NASA researchers.

The rover is the most advanced robot to ever land on a foreign planet, but it isn't travelling alone. Tucked away inside its shell is Ingenuity – a helicopter that will make history as the first to ever fly on an alien planet. Ingenuity is expected to fly for 90-second long missions and hover up to five metres off the ground. If it works, scientists will send more advanced helicopters to Mars in the future.

Glossary

Red Planet	A nickname for Mars, recognising the planet's dusty red appearance.
orbiting	Travelling in a circle around something, such as a planet or star.
probes	Spacecraft which studies things in space and sends the information back to Earth.

Questions

1. What is the name of the helicopter on board the Perseverance?

2. The phrase 'If it touches down successfully' suggests that... **(tick one)**

The landing will definitely go to plan.

The landing may not go to plan.

All landings on Mars are smooth.

The landing will be a failure.

3. In the second paragraph, find a word that means the same as 'far away'.

4. Tick to show whether the statement is true or false according to the article.

	True	False
Landing is the easiest part of the mission.		
Scientists are trying to find out whether life ever existed on Mars.		
Perseverance is the largest vehicle ever sent to explore Mars.		
Perseverance has 5 wheels.		

5. Do you think it is important to explore Mars? Explain your answer.

6. Summarise the key information in the article using 15 words or fewer.
