

### Task 1: Read the text. Was your prediction correct?

How many planets are there in our galaxy? That's a **tricky** question to answer. Are there other planets that support life? In March 2009, that's exactly what the Kepler mission hoped to discover.

NASA launched the Kepler space telescope, designed to find habitable planets. It discovered five new Earth-sized planets beyond our solar system. These planets are hotter than the Earth's sun – much too hot for life as we know it. The mission did not find an Earth 2.0 planet.

The simplest requirement for a planet to have carbon-based life, like on Earth, is for there to be liquid water (not frozen or gas) so the distance from the planet's sun and therefore temperature is important. There also needs to be the correct amount of air. If a planet is as small as Mars (half the **size** of Earth) its **weak** gravity means that it can't hold on to air molecules. If a planet is Neptune sized (four times bigger than Earth) it has very strong gravity and too much air. So size matters too.

The Kepler mission cost approximately six hundred million dollars. It was initially scheduled to observe until 2013 but the project was extended until 2018. While Kepler didn't find **evidence** of other life forms, it produced a lot of data that kept scientists busy for years after the mission ended. The new planets that were discovered outside of our solar system were categorised as exoplanets.

### Glossary

tricky – difficult

size –if a thing is big or small

weak – the opposite of strong

evidence- facts or information

### Task 2: Read and match 1-5 with a-e to make sentences about the text.

1 The Kepler space telescope	a) are not in our solar system.
2 Kepler found five planets that	b) doesn't have enough air.
3 A planet can support life if it	c) has too much air.
4 A very small planet	d) is looking for other planets.
5 An extremely big planet	f) has water and air.