



## READING PASSAGES · ANSWER KEY

## MARS

All 3 reading levels · Sample answers shown — accept reasonable variations

**Teacher tip:** Answers shown are model responses. Many comprehension questions can be correctly answered in multiple ways — the goal is to check that students can pull key ideas from the text in their own words. For Level 1, accept any answer that shows comprehension; phrasing doesn't need to match.

## 1 EMERGING

AGES 6–8 · 4 QUESTIONS

## Mars: The Red Planet

1. What is another name for Mars?

**A:** Mars is also called the Red Planet.

3. How many moons does Mars have, and what are their names?

**A:** Mars has two moons. They are called Phobos and Deimos.

2. Why does Mars look red?

**A:** Mars looks red because rusty dust covers its rocks and is even blown into the sky.

4. What are robots from Earth doing on Mars right now?

**A:** Robots are driving around on Mars, taking photos, and digging in the dirt.

## 2 ON-GRADE

AGES 8–10 · 5 QUESTIONS

## Mars: Our Closest Neighbour

1. What gives Mars its red colour?

**A:** Mars's red colour comes from iron oxide (rust) on its dust and rocks.

3. Name two extreme features found on Mars and describe what makes them special.

**A:** Olympus Mons (the largest volcano in the solar system, about 22 km high) and Valles Marineris (a canyon long enough to stretch across the United States). Either accept similar variants.

5. What are scientists hoping to find by exploring Mars?

**A:** Scientists are searching for clues that tiny living things may once have lived on Mars, especially in places where ancient lakes used to be.

2. How does a year on Mars compare to a year on Earth, and why?

**A:** A Martian year lasts almost twice as long as an Earth year because Mars is farther from the Sun and has a longer path to travel around it.

4. Why is it so cold on Mars, even on a summer day?

**A:** Mars has a very thin atmosphere that cannot trap heat the way Earth's thicker atmosphere does, so warmth escapes quickly — especially at night.

## 3 ADVANCED

AGES 10–12 · 6 QUESTIONS

## Mars: The Search for Ancient Life

1. What causes Mars to appear red, both to our eyes and in photographs?

**A:** Mars appears red because of iron oxide (rust) coating its dust and rocks.

3. Why does liquid water not exist on the Martian surface today?

**A:** Liquid water cannot exist on the Martian surface because the atmosphere is far too thin to keep water from boiling away or freezing.

5. Why are scientists planning to return Martian rock samples to Earth?

**A:** Scientists want to study Martian rocks in laboratories on Earth to look for traces of ancient microbial life and to learn what Mars was like billions of years ago.

2. Describe two ways Mars is similar to Earth and one way it is very different.

**A:** Similarities: a day length almost equal to Earth's (24h 37m); a tilted axis that gives it four seasons; polar ice caps. Differences: much thinner atmosphere, much colder, no liquid water on the surface. (Accept any reasonable answer.)

4. What evidence suggests Mars was very different in the distant past?

**A:** Dried-up riverbeds, ancient lake basins, and minerals that only form in water all suggest that Mars once had flowing water — and possibly a thicker atmosphere and oceans.

6. What do the words "dormant" and "microbial" tell you about the kinds of things scientists are looking for on Mars?

**A:** "Dormant" suggests volcanoes that aren't erupting now but could again — meaning Mars was once geologically active. "Microbial" tells us scientists are looking for very small, simple life forms — not big creatures.