

Space Neighbors

Compare the Sun, Earth, and Moon through close reading.

4.6.d “the relative size, position, age and makeup of Earth, the moon, and the sun.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline every size fact, circle every position fact, and draw a box around every age or makeup fact in the passage.

Three Objects, One System

- ① On a clear night, the moon may look almost as large as the sun. This is a trick of distance. The sun is much farther from Earth than the moon, but it is also much larger. The sun is a star at the center of our solar system. Earth travels around the sun, and the moon travels around Earth.
- ② The sun is about 109 times as wide as Earth. Earth is about four times as wide as the moon. Earth is a rocky planet with land, water, and air. The moon is a rocky body with a dusty surface and almost no air. Unlike Earth and the moon, the sun is made mostly of hot hydrogen and helium gases.
- ③ Scientists estimate that the sun is about 4.6 billion years old. Earth formed about 4.5 billion years ago, and the moon formed soon after Earth. These ages mean all three formed long before people lived on Earth. Their positions and makeup affect what we observe. For example, the moon reflects sunlight because it does not make its own light like the sun.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What does Earth travel around, and what does the moon travel around?

2 How do the sizes of the sun, Earth, and moon compare?

3 How is the makeup of Earth different from the makeup of the sun?

4 Which object formed first, and which object formed soon after Earth?

3 YOUR TURN _____ Your own words

Write a 65 to 85 word museum caption about the Sun, Earth, and Moon. Include a relative size fact, each object's position, age information, and makeup.

PART 1 • READ AND MARK

Underline every size fact, circle every position fact, and draw a box around every age or makeup fact in the passage. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What does Earth travel around, and what does the moon travel around?	Earth travels around the sun. The moon travels around Earth.
2	How do the sizes of the sun, Earth, and moon compare?	The sun is about 109 times as wide as Earth. Earth is about four times as wide as the moon.
3	How is the makeup of Earth different from the makeup of the sun?	Earth is a rocky planet with land, water, and air. The sun is made mostly of hot hydrogen and helium gases.
4	Which object formed first, and which object formed soon after Earth?	The sun formed first. The moon formed soon after Earth.

PART 3 • YOUR TURN (SAMPLE ANSWER)

At our space museum, three neighbors have features. The Sun is a hot star at the center of our solar system, made mostly of hydrogen and helium. It is about 4.6 billion years old and 109 times as wide as Earth. Earth is a 4.5-billion-year-old rocky planet with land, water, and air that orbits the Sun. Earth is about four times as wide as the Moon. The Moon formed soon after Earth. It is a smaller, rocky, dusty body that orbits Earth and reflects sunlight.

Accept accurate wording that compares relative size, position, age, and makeup. For the caption, accept 65 to 85 words that includes all required ideas, even if students use different sentence order.