

Name:

Date:

## Planetary Systems Summative Assessment

1. Why does using models make it easier to understand planetary systems? Describe one example of how using models has helped in your understanding of planetary relationships.

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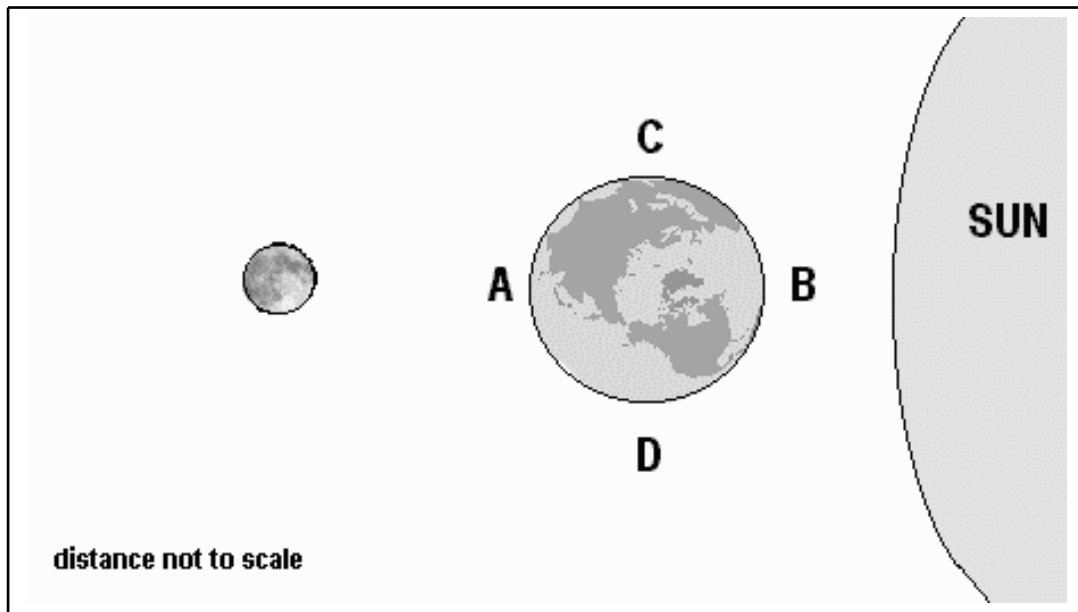
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*Use the diagram below to answer Question 2:*



2. Shade the side of the Earth model that is experiencing night. If the Earth's period of rotation became faster, how would it affect the number of hours of daylight? **Explain.**

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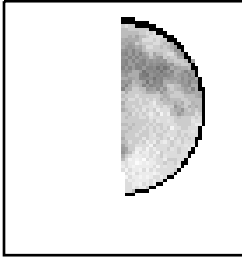
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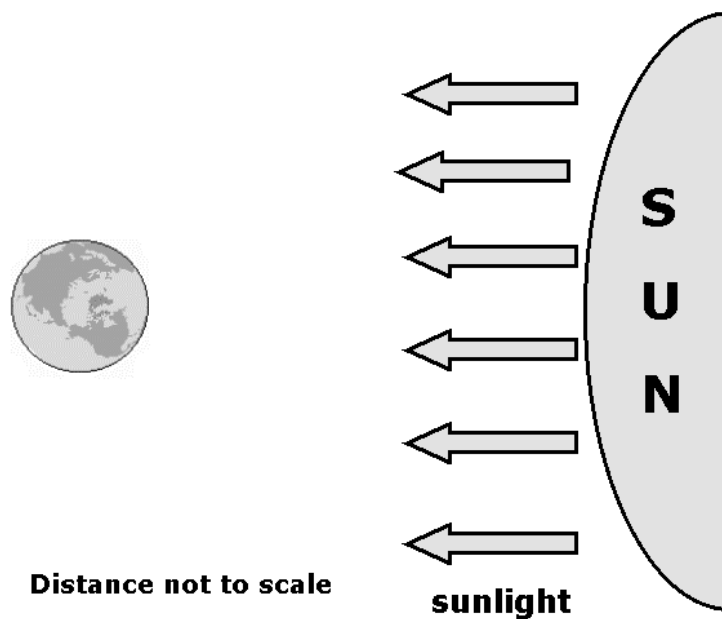
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3. The diagram above shows the Moon's phase as seen from Earth. In the space provided below, **draw and label** the position of the Moon during this phase. Make sure the Moon is drawn to scale with the Earth's diameter.



4. The moon goes through several phases in one month. One half of the Moon is always illuminated. Explain what causes the phases of the moon?

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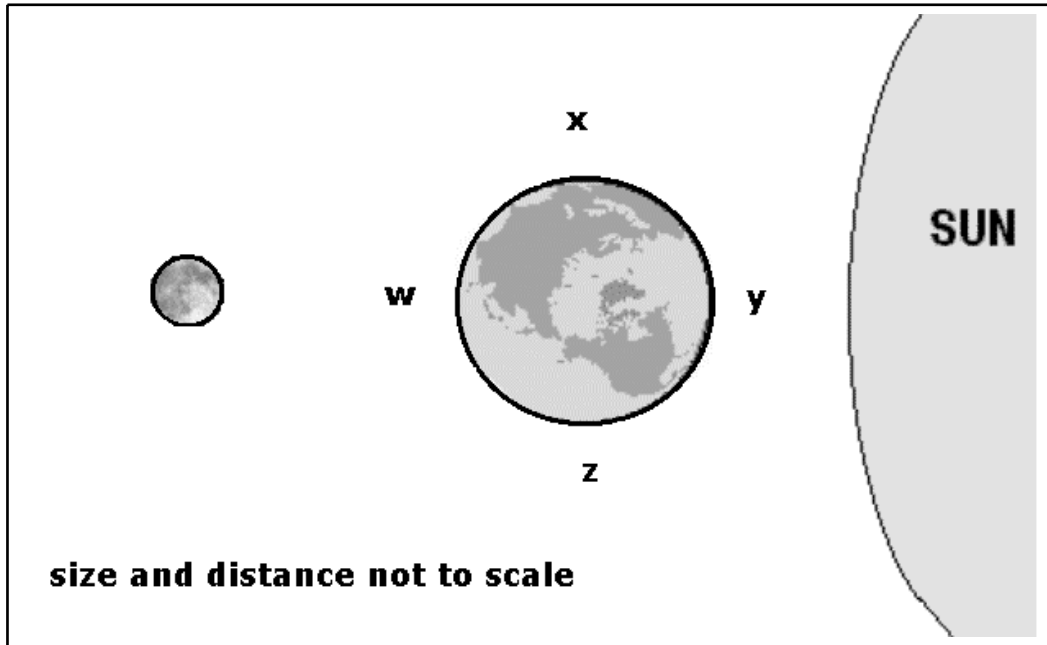
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5. If Earth, Moon, and Sun were in the orientation in the diagram above, which lettered location(s) on the Earth would experience high tide? In the space provided below explain why.

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6. Describe **two** conditions on Earth and how they make it suitable for life as we know it?

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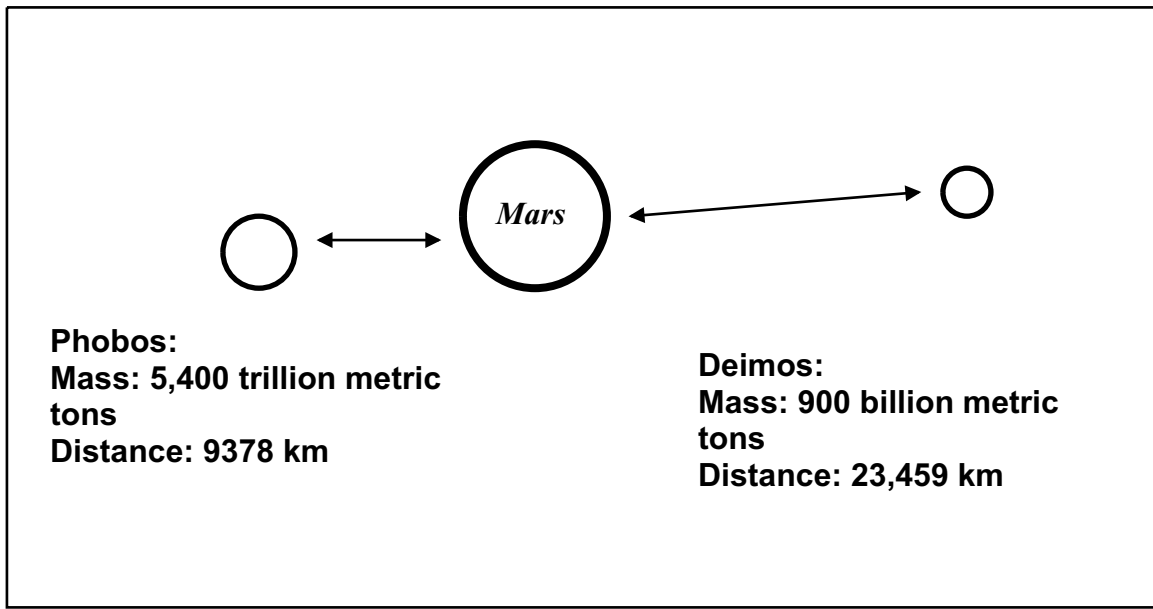
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7. Mars has two moons, Phobos and Deimos. Use the diagram above and describe which moon (if any) has more of a gravitational affect on Mars and why?

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8. Use 2 examples to explain how technology has advanced our understanding of the solar system.

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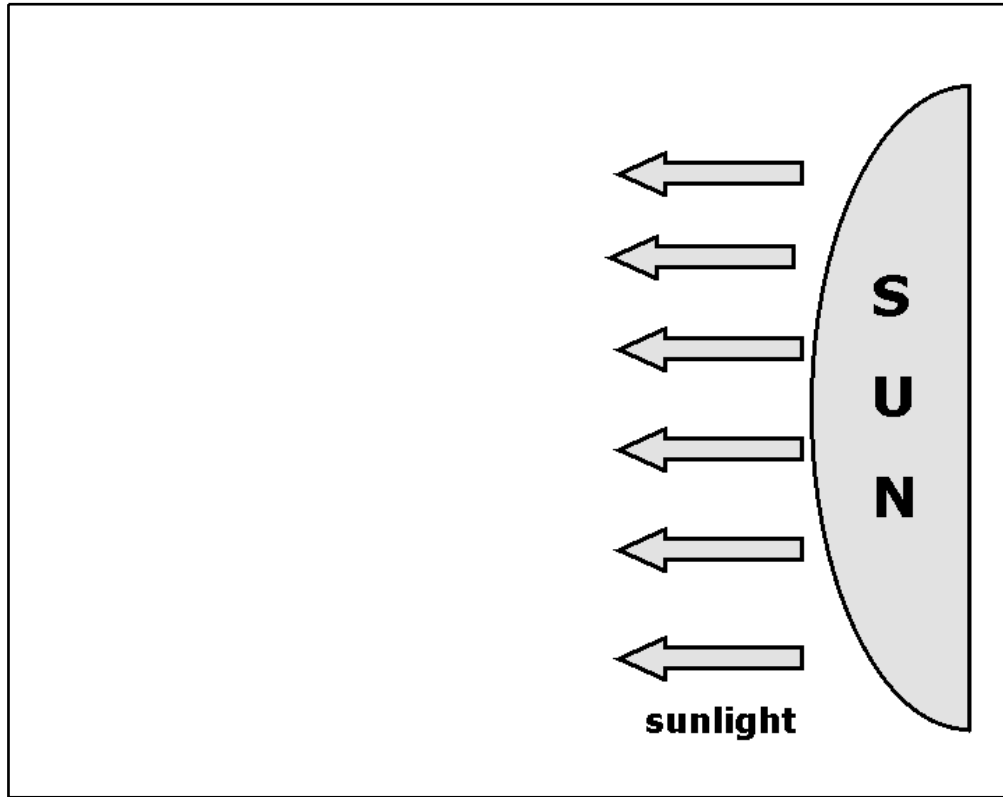
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9. In the space below, draw a diagram that represents the orientation of the Sun and Earth during the summer in the Northern Hemisphere. Label the North and South Poles.



Explain why it is warmer in the summer than the winter in the Northern Hemisphere.

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