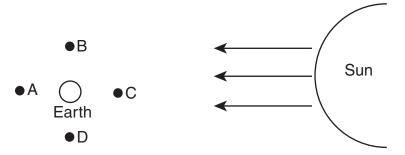
## **Checkout Questions**

## Lab 1. Moon Phases: Why Does the Appearance of the Moon Change Over Time in a Predictable Pattern?

1. The diagram below shows Earth and the Sun, as well as four different possible positions for the Moon (A, B, C, and D).



a. Which position of the Moon (A, B, C, or D) would cause it to appear like the picture below when viewed from Earth? Circle the letter below.

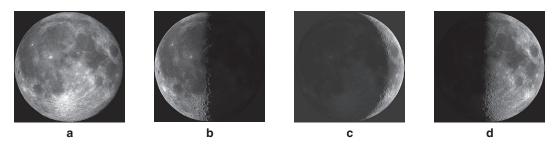




b. How do you know?

## LAB 1

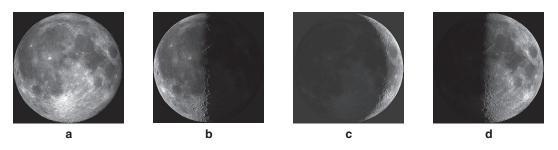
- 2. You observe a crescent Moon rising in the east.
  - a. Which of the following pictures illustrates how it will appear in six hours?



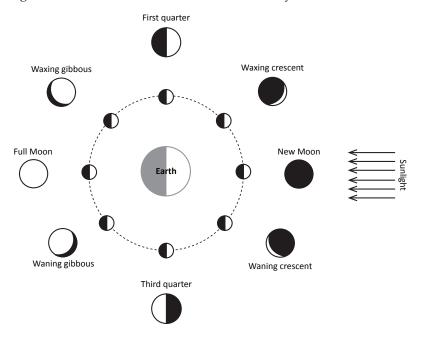
- b. How do you know?
- 3. One night you look at the Moon and see this:



a. Which of the following pictures illustrates how it will appear one week later?



b. How do you know?



4. The image below is a model of the Earth-Sun-Moon system.

a. What are some strengths of this model?

b. Based on what you know about the Earth-Sun-Moon system from your investigation, what are some limitations or incorrect portions of this model?

## LAB 1

5. Scientists often look at patterns to identify relationships in nature. Give an example of a pattern from your investigation on Moon phases.

- 6. Models are pictures of things that we cannot see.
  - a. I agree with this statement.
  - b. I disagree with this statement.

Explain your answer, using an example from your investigation about the phases of the Moon.

- 7. There is a single scientific method that all scientists follow when conducting an investigation.
  - a. I agree with this statement.
  - b. I disagree with this statement.

Explain your answer, using an example from your investigation about phases of the Moon.