


5.  (UC ASSESSMENT) Write a description and draw pictures that you could use to explain the reason for the phases of the Moon to a friend.

A level 3 response should include diagrams of several phases.

**Level 3 Response:**

The phases of the Moon are caused by the Moon's orbit as it revolves around Earth. Only the side of the Moon facing the Sun is lighted. If the Moon is on the side of Earth opposite the Sun, then we see the light side of the Moon, as in A below. If the Moon is on the same side as the Sun, we see the dark side, as in C below. If the Moon is somewhere in between, we see part of the dark side and part of the light side, as in B below.

6. **Reflection:** How have your ideas about the reason for the phases of the Moon changed since you began this unit?

Students' answers should recap their initial ideas and compare them to the scientifically accepted idea that the phases of the Moon are due to the Moon's revolution around Earth and the resulting change in perspective on the light and dark sides of the Moon as observed from Earth.

**Diagram for Level 3 Response to Analysis Question 5**

