


# It's Just a Phase!

## Procedure

- 1. Collaborate** Dim the lights in the room. Hold the small ball slightly above your head. Have your partner hold a flashlight about a meter (3 feet) away. Shine the flashlight on the ball.  
**Safety:** Do not shine the flashlight directly at someone's eyes.
- 2. Use Models** Your head represents Earth, the ball is the Moon, and the flashlight is the Sun. Observe how the Moon appears to you in this position.
- 3. Observe** As you hold the Moon steady, slowly rotate in a circle. Your partner should not move the flashlight. Observe how the Moon appears to change.
- 4. Communicate** In the space below, draw how the Moon appeared in at least four different positions. Organize your drawings to best show the process they model.



- 5. Experiment** Switch roles with your partner and repeat the procedure.

## Conclusion

Write the answers to the questions.

1. **Compare** Describe what the Moon looked like at each of the four positions.

---

---

---

---

2. **Analyze Data** Using your data, explain why you think the Moon appears to change shape from night to night.

---

---

---

## Investigate More!

**Design an Experiment** How does Earth appear when viewed from the Moon? Does Earth appear to change shape, or does it always look the same? Design an experiment to find out.