Quick Lab

The Angle of the Sun's Rays

MATERIALS

- sheet of paper, 2
- meterstick
- flashlight

Chapter 26.2

PROCEDURE

- 1. Turn the lights down low or off in the classroom.
- 2. Place a sheet of paper on the floor. Using a meterstick, hold a flashlight 1 m above the paper, and shine the light of the flashlight straight down on the piece of paper.
- 3. Have a partner outline the perimeter of the circle of light cast by the flashlight on the paper. Label the circle "90° angle." Place a clean sheet of paper on the floor.
- 4. At a height of 0.5 m from the floor, shine the light of the flashlight on the paper at an angle. Make sure the distance between the flashlight and the paper is 1 m.
- 5. Have a partner outline the perimeter of the circle of light cast by the flashlight on the paper. Label the circle "low angle."

ANALYSIS

- 1. Compare the two circles drawn in steps 3 and 5. Which circle concentrates the light in a smaller area?
- 2. Which circle would most likely model the sun's rays striking Earth during the summer season?