

Student Book
Activity 81 • Moon Phase Simulator

MATERIALS

For each pair of students

1 computer with access to the Moon Phase Simulation

For each student

1 Student Sheet 71.1b, "My Ideas About the Day, Year, Seasons, and Moon Phases: After"

PROCEDURE

Part A: Exploring the Simulation

1. Open the Moon Phase Simulation on your computer.
2. Identify Sunlight, Earth, and Moon.

Note: the view of Earth is from the North Pole.

3. Click the Play button and describe any changes that occur. Click the Pause button to pause the motion.

Part B: Observing the Phases

4. Select New Moon in the drop down menu under Select Moon Phase.
5. Look carefully at the where the Moon is relative to Earth and the sunlight. Make a labeled sketch of you observe in your science notebook. Title your sketch with the name of the phase.
6. Repeat Steps 4 and 5 for First Quarter, Full Moon, and Third Quarter.
7. Press Play and then press the Fast Forward button to make the simulation go more quickly. Observe the pattern between how the Moon's position changes and how the Moon's phase changes.

ANALYSIS

3. Look at your Part B sketches for the New Moon, First Quarter, Full Moon, and Third Quarter. What Moon phase comes next in this pattern? Explain.