

**SEPUP's Science Grade 8: Texas Edition**  
**Student Book Changes**  
**Activity 73 • Moon Phase Simulator**

**MATERIALS**

For each pair of students

1 computer with access to the Lunar 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 Lunar Phase Simulation on your computer.
2. Click HIDE in the Moon Phase Diagram and in the Horizon Diagram.
3. All Diagram Options should be UNCHECKED.
4. Identify Sunlight, Earth, and Moon. Note the view of Earth is from the North Pole.
5. Click on START ANIMATION and describe any changes that occur. Click PAUSE ANIMATION to pause the motion.

Part B: Observing the Phases

6. Click PAUSE ANIMATION.
7. Click SHOW in the MOON PHASE box. Select NEW MOON in the drop down menu under MOON PHASE.
8. Look carefully at the objects in the two boxes. Make a labeled sketch of them in your science notebook. Title your sketch with the name of the phase.
9. Drag the moon 90 degrees counterclockwise. Make a titled and labeled sketch as you did in Step 8.
10. Repeat Step 9 until you have made sketches for 180 degrees, 270 degrees and 360 degrees.
11. Click on START ANIMATION, and describe what happens. Click on PAUSE ANIMATION to pause the motion.

Analysis

3. Compare your Part B sketches for the first MOON PHASE and the last MOON PHASE. Explain why these phases look the same.