

Group Members:

Phases of the Moon

This lab is designed to lead you to a thorough understanding of why the moon goes through phases. You will be using the observations of the moon from the last three weeks as you do this activity.

1) Interpreting your moon log observations.

Use your observations from the last three weeks to summarize the pattern of lunar phases:

- a) Describe how the angle of the moon from the sun has changed in the last three weeks.

- b) Describe how the amount of the moon that appears to be illuminated has changed in the last three weeks.

- c) What does the term “waxing” mean? What does the term “waning” mean? How do these definitions relate to the changing angle of the moon from the sun and to the changing illumination of the moon over the last three weeks?

d) Use your data for your first and last observations of the moon to fill in the following table:

	First observation	Last observation
Date of observation		
Angle and direction of moon from the sun		
# of days between first and last observation		
Angle the moon moved between first and last observation		
# of degrees that the moon moves per day		
Using this data, how long will it take the moon to make one complete orbit of the earth (360°)?		

e) Explain how you determined how long it will take the moon to make one complete cycle of phases.

Part 2: NAAP Lunar Phase Simulator

Follow the instructions in the NAAP Lunar Phase Simulator Student Guide