

Lab #54: Features of the Moon

PROCEDURE AND LAB REPORT

Date: _____ Your name: _____ Partner's name: _____ Section: ____/____

Maximum two students may work together as partners!

This laboratory requires that students draw on the image of the Moon. For this reason, the report must be printed out and the paper copy must be used.

1. Set a telescope on the Moon. Focus the image. Find out the data of your telescope.

The Moon is ____ days old today.

The optical design of the telescope: _____.

Telescope diameter: _____ Objective's focal length: _____

The focal length of the eyepiece: _____ Calculate the magnification: _____ x



2. Orientation and terminator.

Some telescopes give you a regular image, and others give a mirror image. As a baseline, look at the Moon with the naked eye. Which of the two images corresponds to what you are seeing? You may want to turn the map the way the Moon is in the sky. Indicate the “up” direction on the correct map with a red marker. Draw the location of the terminator and blacken out the dark part of the Moon.

- 3. Find three maria that are visible now in the telescope using the attached Moon map. Indicate their places with numbers 1, 2 and 3 on the picture above.** I have found the following maria:

#1: _____,

#2: _____,

#3: _____.

- 4. Find a large crater visible in the telescope today. Indicate it with #4 on the picture above. Use the laminated Moon map to find its name.**

I have found the following crater: #4: _____.

- 5. Find a crater along the terminator. Indicate its approximate position in the above picture with #5, and record its name. Using a high magnification eyepiece, center your crater in the field of the telescope and show it to your instructor.** I have found the following crater on the terminator: #5: _____ Instructors initials: correct _____, incorrect _____, correct but not along the terminator _____.

- 6. Using higher magnification, find a crater with a visible central peak and show it to your instructor.**

Found: _____ (instructor's initials).

- 7. For extra credit:** find any of the mountains or valleys on the Moon and show them to the instructor. Look for one close to the terminator. Name: _____

Extra credit: ____, _____ (instructor's initials).