NAME_____

SECTION: Mon Tue1 Tue2 Wed Thu1 Thu2

ASTRONOMY LAB

INDEPENDENT EXERCISE

PRICES FORK OBSERVATORY OPEN HOUSE

Turn in this writeup to your Teaching Assistant at the next lab meeting after the open house you attend.

This exercise provides you the opportunity to view celestial objects you may not ordinarily observe on campus during a normal lab session. You will also get to see and use a larger telescope, in a real observatory dome. This exercise is intended to be both fun *and* educational; we hope you see some 'cool stuff' while simultaneously learning some astronomy on the side.

BACKGROUND

The Virginia Tech Department of Physics maintains and operates several off-campus astronomical observatories. These observatories are used for instructional purposes and for public open houses. As part of this course, you can attend one of the public open house sessions at the Prices Fork Observatory.

Public open houses at the Prices Fork Observatory are held on Fridays of each month that classes are in session during the fall and spring semesters. These are the *only* times that the observatory is open for these public shows. **The observatory docent ("tour guide") will cancel open houses when the weather is cloudy.** There is a small probability that *no* open houses will occur this semester. Plan to attend one of the Open Houses early in the semester if you want to you have a greater chance of completing this exercise.

PREPARATION

Go to the webpage for the Prices Fork Observatory Open Houses (the internet address is http://www.phys.vt.edu/~jhs/astrophy/openhouses.html). Read the webpage. This webpage provides exact instructions for determining if an open house will occur on one of the designated evenings.

On the evening that you have chosen to attend, call the observatory message service about an hour before the open house's scheduled starting time. If the message that you hear has not been updated, call back in about 15 minutes. Continue to call until the voice message states if the open house is occurring that evening. Do not make any assumptions about whether the Open House

will take place or has been cancelled! Calling the Observatory recorded message is the only way to verify if the observatory will be open or closed.

When you arrive at the observatory, you will observe those objects that the observatory docent shows. If there are particular objects you want to see, do not hesitate to request them! Keep in mind, however, that this is a *public* open house – i.e., it is not a class; members of the New River Valley community will also be in attendance so, it might not be possible to view everyone's favorite celestial object. You should also keep in mind that the size of the crowd might prohibit prolonged viewing through the telescope. Please be quick and efficient when obtaining the information requested in this exercise.

GRADING POLICY

As for all labs, fill out all sections of this handout. This exercise will be graded based on the 10-5-0 scale used for all other lab exercises. Failure to complete all sections will result in a grade penalty. You must provide written comments and a description of the objects you observe.

Be sure to have the observatory docent sign and date your lab before you leave. (But he or she is *not* responsible for checking your work!) The signature is to verify that you attended the open house. **You will receive a '0' if you fail to obtain the docent's name and dated signature**.

OPEN HOUSE OBSERVATIONS

Observatory Docent/Guide: _____

"Lab Partners" (*if any*)**: _____**

(List names of group members if you carpooled, came with a 'study group,' etc.)

I. The Telescope

A. What is the brand name of the telescope mounted on the pier in the observatory dome?

B. Is this a *reflecting* or a *refracting* telescope?

C. What *type* of telescope (Newtonian, Schmidt-Cassegrain, etc.) is this?

II. Observed Objects

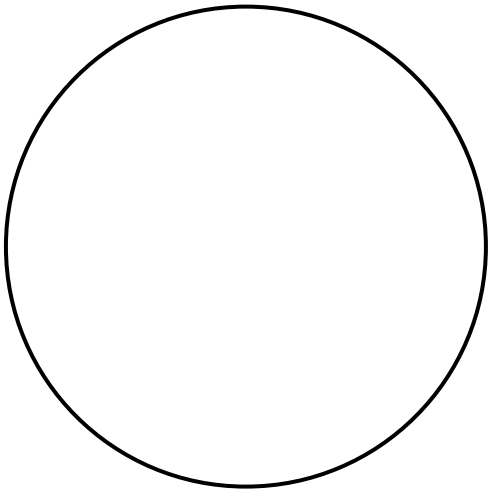
Sketch 3 – 5 objects that you observed tonight. Briefly describe each. (e.g., *What is it? How far away is it? Were there any other interesting facts that you learned tonight? Etc.*) Comments do not have to be detailed but you must include some useful information on each object.

Object:

Date & Time:

Weather Conditions:

Comments & Description:

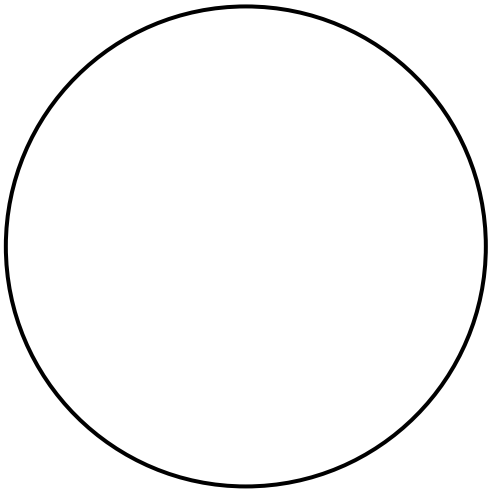


Object:

Date & Time:

Weather Conditions:

Comments & Description:

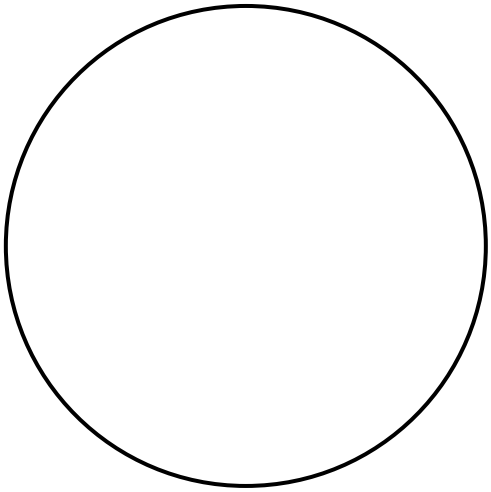


Object:

Date & Time:

Weather Conditions:

Comments & Description:

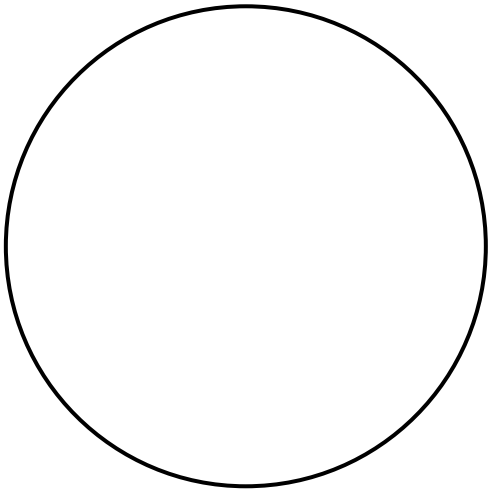


Object:

Date & Time:

Weather Conditions:

Comments & Description:



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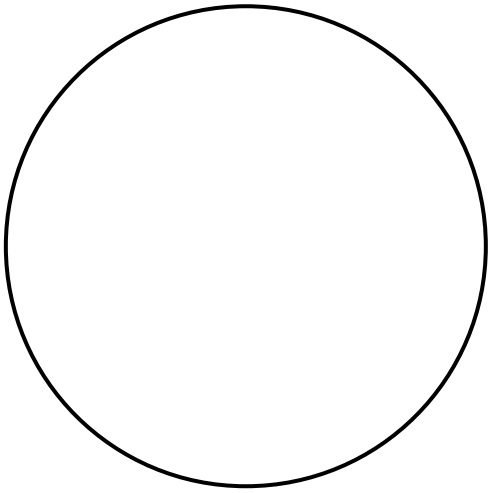
Weather Conditions:

Comments & Description:



Please use this space to explain any additional facts or trivia that you learned tonight.

In order to receive ***any*** credit for this assignment, the **observatory docent must date and sign below**, indicating that you were present for an open house.

I, _____ *(Open House Docent)*, certify that the student named above was present at the Price's Fork Observatory Open House on the date specified.

_____ _____/_____/_____

Docent's Signature *Date*
