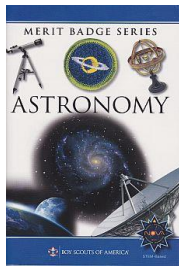


## Pre-Requirements for Astronomy Merit Badge Workshop



Please complete the pre-requirements listed below to receive your Astronomy Merit Badge at the conclusion of the Merit Badge Workshop at the Woodstock Challenger Learning Center. These pre-requirements must be complete before attending the workshop to receive an Astronomy Merit Badge on the day of the workshop. If you choose to complete them after, you can receive your Astronomy Merit Badge at a later date by having the requirements approved by your Scout Master or a certified Merit Badge Counselor.



To research the following information, use the Astronomy Merit Badge booklet. You are responsible for bringing this with you to the Astronomy Merit Badge Workshop as it will be needed during various activities. Some booklets will be provided at the workshop if you are unable to purchase it beforehand.

Answers can be recorded in the Astronomy Merit Badge Workbook. This workbook can be found and printed out using the website below.

<http://www.usscouts.org/mb/worksheets/Astronomy.pdf>

Using the Boy Scouts of America Astronomy Merit Badge Requirements, please complete the following before attending the workshop. The requirements can be found at the website listed below.

<http://www.scouting.org/scoutsource/BoyScouts/AdvancementandAwards/MeritBadges/mb-ASTR.aspx>

### 1. Do the Following:

- a. Explain to your counselor the most likely hazards you may encounter while participating in astronomy activities, and what you should do to anticipate, help prevent, mitigate, and respond to these hazards.
- b. Explain first aid for injuries or illnesses such as heat and cold reactions, dehydration, bites and stings, and damage to your eyes that could occur during observation.
- c. Describe the proper clothing and other precautions for safely making observations at night and in cold weather. Then explain how to safely observe the Sun, objects near the Sun, and the Moon.

2. Do the Following:

b. Sketch the phase and the daily position of the Moon, at the same hour and place, for four days in a row. Include landmarks on the horizon such as hills, trees, and buildings. Explain the changes you observe. **The Moon Observation Sheet has been provided for you. Please bring these sketches on the Moon Observation Sheet with you to the Astronomy Merit Badge Workshop.**

4. With your counselor's approval and guidance, do **ONE** of the following:

a. Visit a planetarium or astronomical observatory. Submit a written report, a scrapbook, or a video presentation afterward to your counselor that includes the following information:

1. Activities occurring there
2. Exhibits and displays you saw
3. Telescopes and other instruments used
4. Celestial objects you observed

*Suggested places where this can be completed: Adler Planetarium in Chicago, Yerkes Observatory in Williams Bay, WI., Dearborn Observatory in Evanston, IL., Burpee Museum in Rockford, IL.*

b. Plan and participate in a three-hour observation session that includes using binoculars or a telescope. List the celestial objects you want to observe, and find each on a star chart or in a guidebook. Prepare an observing log or notebook. Show your plan, charts, and log or notebook to your counselor before making your observations. Review your log or notebook with your counselor afterward.

c. Plan and host a star party for your Scout troop or other group such as your class at school. Use binoculars or a telescope to show and explain celestial objects to the group.

d. Help an astronomy club in your community hold a star party that is open to the public.

*Use the website listed below to find astronomy clubs in your community:*

<http://www.go-astronomy.com/astro-clubs-state.php?State=IL>

e. Personally take a series of photographs or digital images of the movement of the Moon, a planet, an asteroid, meteor, or a comet. In your visual display, label each image and include the date and time it was taken. Show all positions on a star chart or map. Show your display at school or at a troop meeting. Explain the changes you observed.

### **Moon Observation**

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Telescope: \_\_\_\_\_

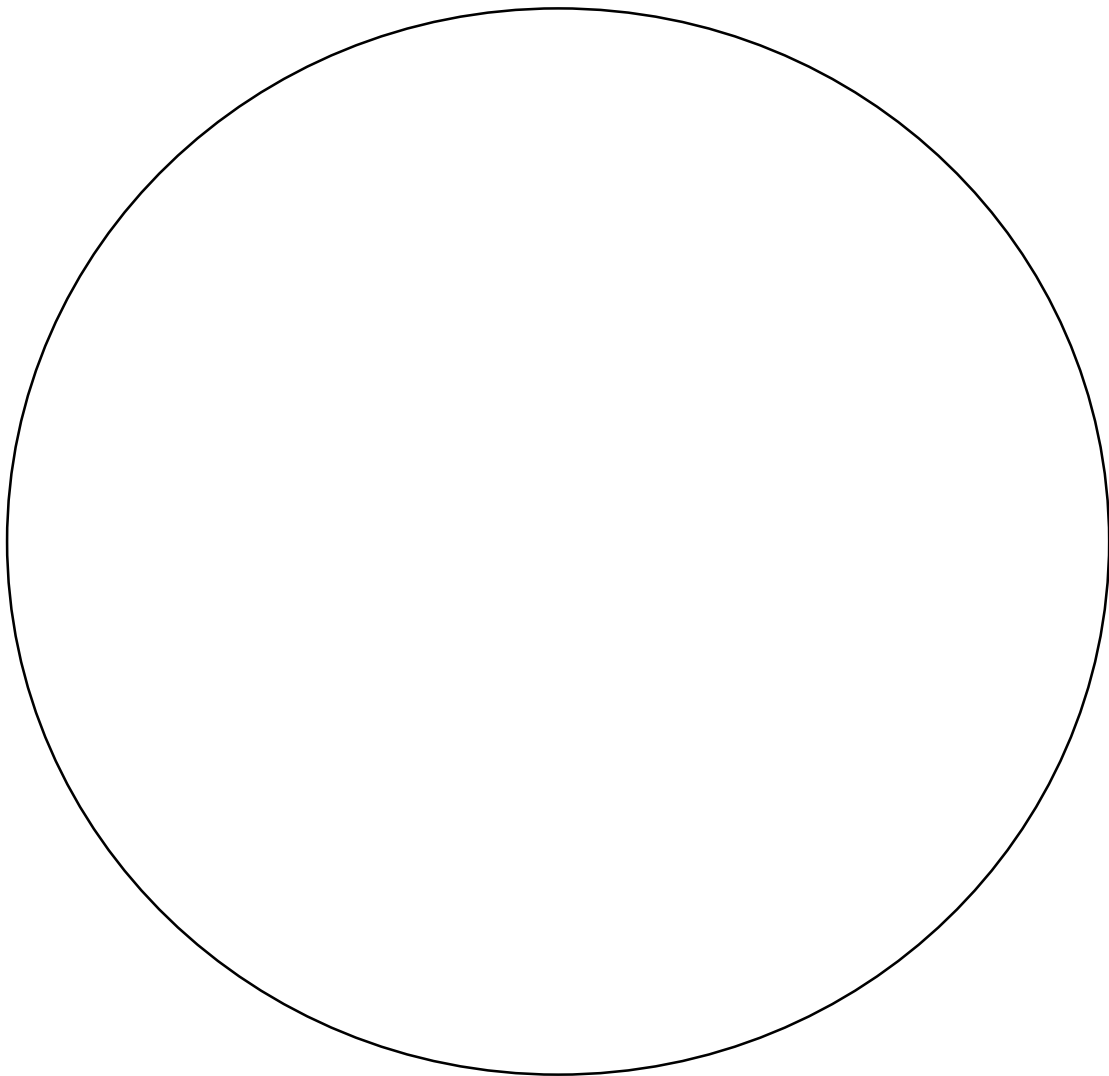
Power: \_\_\_\_\_

Crater(s): \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Write a summary of your observing session and share it with your counselor.**