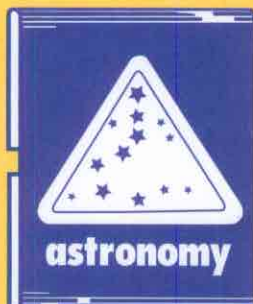


Cub Scout Academics: Astronomy



REQUIREMENTS

Tiger Cubs, Cub Scouts, and Webelos Scouts may complete requirements in a family, den, pack, school, or community environment. Tiger Cubs must work with their parents or adult partners. Parents and partners do not earn loops or pins.

Belt Loop

Complete these three requirements:

- _____ 1. Demonstrate how to focus a simple telescope or binoculars. (A local astronomy club may be a resource for this activity.)
- _____ 2. Draw a diagram of our solar system—identify the planets and other objects.
- _____ 3. Explain the following terms: planet, star, solar system, galaxy, the Milky Way, black hole, red giant, white dwarf, comet, meteor, moon, asteroid, star map and universe.

Academics Pin

Earn the Astronomy belt loop, and complete five of the following requirements:

- _____ 1. Draw a diagram of a telescope and explain how it works.
- _____ 2. Explain how to use a star map.
- _____ 3. Draw and label five constellations. See if you can locate any of them in the sky using a star map.

- _____ 4. Find the North Star. Explain its importance.
- _____ 5. Interview an astronomer. This person may be a professional or an amateur astronomer from a local astronomy club. Report what you learned to your den or family.
- _____ 6. Learn about careers that relate to astronomy. What school subjects will help you get a job in astronomy?
- _____ 7. Visit a planetarium or a local astronomy club. Give a report on what you learned to your den.
- _____ 8. Make a poster illustrating the different kinds of stars. Include a diagram showing the life cycle of a star.
- _____ 9. Learn about some of the early space missions. Tell your den or family about one of them.
- _____ 10. Find a news story about a recent happening related to space. Tell your den or family about this event.
- _____ 11. Write a report on two famous astronomers.
- _____ 12. Locate three major observatories on a map. Explain why these locations are good for astronomy.

Resources

Check the children's section at your local library for information on astronomy. If you have access to the Internet, try using various search engines to look for the information you need.

A field trip to an observatory, planetarium, museum, or local astronomy club may provide an excellent experience in astronomy.

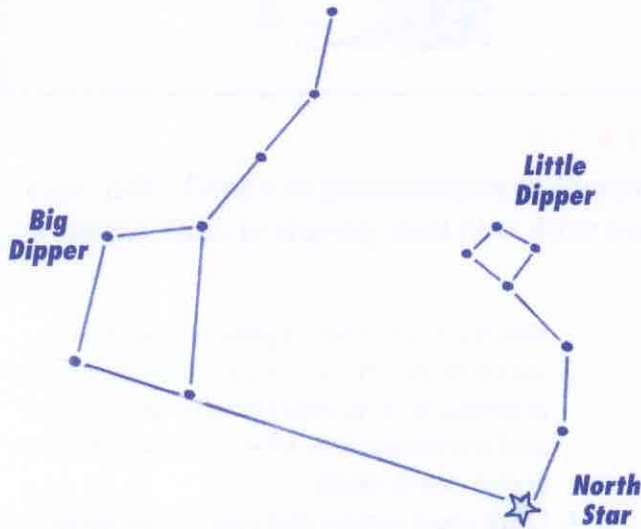
Be sure to check out the Space Place; it has lots of fun, astronomy-related activities:

<http://spaceplace.jpl.nasa.gov>

Constellations

Aries—The Ram
Cancer—The Crab
Crux—Southern Cross
Draco—The Dragon
Gemini—The Twins
Libra—The Scales
Orion—the Hunter
Pegasus—The Winged Horse
Pisces—The Fish
Sagittarius—The Archer
Scorpius—The Scorpion
Taurus—The Bull
Ursa Major—The Great Bear
Ursa Minor—The Lesser Bear

Finding the North Star



Finding the North Star is relatively easy once you find the Big Dipper—one of the easiest constellations to locate. Once you find the North Star you can find the Little Dipper. They won't always be at the same angle, though—in the course of a year, they will both rotate completely around the North Star.

Famous Astronauts

Sally Ride
Ellison Onizuka
John Glenn
Neil Armstrong
Yuri Gagarin
Alan Shepherd
Buzz Aldrin

Famous Spacecraft

Sputnik
Friendship 7
Telstar
Lunar Lander
Apollo 11
Challenger
Apollo 13
Space Shuttle
International Space Station