

Sky Search

The sky is filled with planets, stars, moons, satellites, and more. Instead of just gazing up at the sky, why not learn about what you're looking at? It starts with this badge.



"Orion The Hunter"
constellation
photographed from the
Hubble space telescope





1. Mapping the Skies

Learn how to use a star map. Obtain or make such a map for your stargazing location that adjusts to the time and season when you are observing stars.

2. Constellations

Constellations are stars that appear to be in groups when looked at from Earth. If you were to travel in a spaceship, you would find that most stars that look close together are actually millions of miles apart. Learn to identify at least five of the constellations seen from Earth.

3. Direction, Please

Learn about the North Star and why it has been used for navigation throughout history. Help others locate the North Star. Use the North Star to find two constellations or asterisms (part of a constellation).

4. Planets

Learn which of the nine planets are visible to the naked eye. Try to locate at least one of these during a stargazing adventure. If possible, use a telescope to help you see better detail. Write down what you discover.

5. Connect the Dots

Learn stories from two or more ancient cultures—such as Greek, Norse, American Indian, Pacific Islander, or Chinese—that were used to explain what was seen in the sky.

6. Tools of the Trade

Learn the parts of a telescope and how to use one. If possible, use a tracking telescope or look through telescopes with different magnitudes.

OR

Visit a large observatory and learn what kinds of telescopes are used there. What do astronomers learn by using telescopes?

7. Time for the Moon

Learn more about the moon—its phases, age, names of features—and then take a closer look. The best time to observe the moon is when it is full, or almost full. Use binoculars or a small telescope to help you see the valleys, ridges, mountain ranges, and craters on the moon.

8. The Sky Is Falling!

Learn about meteors, meteorites, meteor showers, and comets. Find out when meteor showers may be visible in your area. With an adult, arrange a meteorite-watching party and count the number you see in an hour.

9. Star Stamps

Address an envelope to yourself or a friend, including your solar system and galaxy address. Draw a stamp on your envelope that celebrates an event in space exploration. Write a letter and include a map to your favorite planet.

10. Mission: Space

Learn about a current mission in space. What is the purpose of the mission, and how is information recorded and sent back to Earth? If possible, follow the mission over a period of time and visit a Web site that describes the mission and shares pictures or data.

Eagle nebula



Phases of the moon

"Leonid Fireball" meteor

