



# Senior Sky

**Pillar:** STEAM/Outdoor

When you've earned this badge, you will understand the sky—from science to stars to stories.



## Seniors will follow these steps to earn their badge:

1. Watch the skies. (Discover)
  - a. Focus on the night sky. Identify 10 constellations, 8 noticeable stars, 5 of which are magnitude 1 or brighter. Learn how to find the North Star from the Big Dipper, and then use the North Star to find North. - <https://www.youtube.com/watch?v=7oxoAAs9TUU>
  - b. Learn about animals in the sky at night vs. during the day. Pick one species and learn more about it! [http://www.skyanimals.com/browse\\_habitat.cgi](http://www.skyanimals.com/browse_habitat.cgi)
  - c. Explore the atmosphere. <https://sciencestruck.com/atmosphere-layers-in-order>
  
2. Investigate the science of the skies. (Discover, Connect)
  - a. Weather Watch. For one day, track the weather and record the highest and lowest temperatures on Earth. Note extreme weather conditions hurricanes and twisters. Watch a local news stations weather report on Facebook live, ask questions about how they predict the weather. <https://www.facebook.com/kmbc9/>
  - b. Learn to identify the different cloud types. [https://www.almanac.com/kids/identifying-clouds-sky?utm\\_source=pinterest&utm\\_medium=social](https://www.almanac.com/kids/identifying-clouds-sky?utm_source=pinterest&utm_medium=social)
  - c. Try a couple of experiments. Here are two ways to make a cloud in a jar: <https://www.giftofcuriosity.com/weather-science-how-to-make-a-cloud-in-a-jar/> Here is how to make a rainbow storm in a jar: <https://www.growingajeweledrose.com/2016/04/storm-in-jar-experiment.html>
  
3. Explore the connection between people and flight. (Discover, Connect)
  - a. Track a current space mission. Research NASA online to check the launch schedule for an upcoming mission and follow the mission for a week. What's the purpose of the mission? How is information recorded and sent back to Earth? Compile a log based on information you collect. <https://www.nasa.gov/launchschedule>
  - b. Learn about the flight pattern of the International Space Station. Go outside and watch it fly over! <https://spotthestation.nasa.gov/sightings/index.cfm>
  - c. Have some fun with this Paper Airplane Science Experiment: [https://feelslikehomeblog.com/2017/07/paper-airplane-science-an-experiment-designed-and-tested-by-your-kids/?mc\\_cid=f539a8b2ec&mc\\_eid=6f562a9394](https://feelslikehomeblog.com/2017/07/paper-airplane-science-an-experiment-designed-and-tested-by-your-kids/?mc_cid=f539a8b2ec&mc_eid=6f562a9394)
  
4. Help clear sky pollution. (Discover)
  - a. Chart climate change. Visit NASA's website to track a satellite that gives a global view of developments on our planet. Chart how Earth's climate system changes from week to week. Share what you find. <https://www.nasa.gov/subject/3127/climate>



- b. Explore light pollution: <https://www.darksky.org/light-pollution/>
- c. Take notes on what you see of the night sky in town then go out where there is less light pollution. Track what you see.

5. Create sky art. (Take Action)

- a. Write your own story of the northern and southern lights. Perhaps the most mythologized event in the sky is the appearance of the northern and southern lights. Cultures that witnessed the lights would often come up with many interpretations: The Fox Indian tribes of Wisconsin feared the lights were slain enemies. Find photos of these amazing lights, then write your own story about their significance. Make it a bedtime story.
- b. Collect sky stories here: <https://www.girlscouts.org/en/girl-scouts-at-home/activities-for-girls/seniors/senior-create-sky-art-badge-activity.html>
- c. Learn to create beautiful watercolor skies: <https://www.youtube.com/watch?v=3kojEoKgrTY>

**When you're finished:** Congratulations, you have earned your badge! You can purchase online at <https://www.girlscoutshop.com/SENIOR-SKY-BADGE>

You can purchase your Girl Scout Virtual main patch and bars at [gsksmo.org/orderpatches](https://gsksmo.org/orderpatches).

