

Race to Space



Objectives:

The Race to Space patch program encourages girls to explore science and technology.

Grade Level Requirements:

To earn the Race to Space patch, Daisies through Ambassadors may complete the requirements with a troop or on their own. Girls may also work on the requirements year after year, earning the patch the first time and year bars thereafter.

When girls complete the necessary activities, the leader approves the program and purchases the patches and/or year bars at a Council shop.

Each grade level must complete the minimum number of activities listed below:

Daisy	4
Brownie	5
Junior	7
Cadette	10
Senior/Ambassador	13

Requirements:

Explore the constellations in the sky.

1. Listen to a story about one of the constellations. Find the constellation in a book or in the sky.
2. Find the North Star and three constellations in a book or through a telescope.
3. Create your own constellation. Draw a picture of it and make up a story about it. Share your story with your group or another group.
4. Learn about women in the aerospace field. Try to have one of those women speak to your troop. How many women astronauts have gone into space? Were any of these women Girl Scouts?

Find out about the space program.

1. When is the next space shuttle scheduled to be launched? Keep a diary of what you learn about it: What will be the mission, date and place launched, daily log of activities? How many will be on board (number of men and/or women)? Were any of the astronauts from another country? Cut out newspaper articles about the mission and include them with your diary.
2. Research the space program of another country. Point out similarities and differences to the United States program. Find out if the country you are studying has worked with the U.S. space team at any time in the past, or are they planning any joint missions with the U.S. in the future?
3. Learn about the space shuttle Challenger. How has the space program changed since 1985? What other mishaps has NASA overcome since the space program began?
4. Find out why the United States sends experiments into space. Why do we invest so much money in the space program?
5. Compare the space shuttle to an earlier model of a U.S. space rocket. How much has technology changed since we began going into space?
6. Read about the Hubble telescope. How is it different from a telescope you would use in your own backyard to look at the stars? How is it the same? What is the Hubble telescope's purpose in space?
7. Learn about the International Space Station. Who is currently on the station? How long do astronauts usually stay on the station? What experiments are they conducting? Which countries have participated in the building and maintaining of the International Space Station?

Learn about astronauts.

1. How do astronauts live in space? Where do they sleep? What is their daily routine?
2. What is weightlessness? How do astronauts learn to live in a weightless environment?
3. Do some career exploration. How do you become an astronaut? What would you study in college? Try to talk to a college student majoring in aerospace.
4. Find out what kind of food astronauts eat. Try to have a "tasting" party with real astronaut food.
5. Compare the space suits from the beginning of space exploration with the ones astronauts use today. Discuss the similarities and differences. How have they improved? Can you come up with any good ideas on a space suit design?
6. Visit an aerospace or flight museum, such as the Southern Flight Museum (Birmingham) or the U.S. Space and Rocket Center (Huntsville). While there, learn at least three facts to share with your troop.
7. Attend a Council event related to the space program.

Share what you have learned while working on this patch.

1. Put together a scrapbook by yourself or with your troop.
2. Make posters.
3. Create a PowerPoint presentation.
4. Build a futuristic "home in space" using recyclable materials (tissue boxes, paper towel rolls, aluminum foil, etc.). You can build a space station, a lunar base, a Mars base, or create your own space environment. After you build your "home," do some research to find out future plans for such bases, the type of equipment that would be used, how many people would live in them, etc. Present your "space home" and research to a group.