



## Space Science Master - Ambassador

### 1. Discover worlds beyond Earth

Plan a mission to another planet in our solar system. How do you wish to explore this planet? Do you want to orbit it? Land on it? Explore it with a rover? Collect and return a sample from it? Do you see a specific location you want to explore? Is it safe to land there? (For example, it may be scientifically interesting, but you might not want to land in or near an active volcano.) Is there an atmosphere? Is there a surface to land upon? Is the surface icy, rocky, or made of liquid? How strong is the gravity? Will you be able to land without bouncing? Will you be able to lift objects or walk around? Record your answers. When you're finished, brainstorm how you to execute your mission on this other world (including any unique parameters your body presents to your mission), and how you would present your findings to a panel of scientists interested in funding your mission.

### 2. Dive into NASA science

Explore NASA Careers online here: <https://women.nasa.gov>. Many women who work for NASA are featured on these sites. You can read about them, watch interviews, and explore links to their work. Which woman inspires you the most, and why? Make a small, printer-paper poster sharing this woman's brief biography and her area of research.

### 3. Explore your interests

Visit <https://science.nasa.gov/citizenscience> to learn about various collaborations between scientists and citizens to gather research and help solve global issues. Pick a topic that inspires you or piques your interest and learn about what the project is, what issue it addresses, what research is being conducted, and how you, a citizen scientist, can join their cause.

### 4. Dig deeper

Take a look at the conditions needed for various life forms found on Earth on this worksheet: <https://my.girlscouts.org/content/dam/girlscouts-vtk2019/local/aid/meetings/A19NASA3/Ambassador%20-%20Organism%20Cards.pdf>. Make a prediction as to where these organisms might be able to live on other planets and moons. Then, see if your predictions were correct by learning about the conditions of various planets and moons here: <https://my.girlscouts.org/content/dam/girlscouts-vtk2019/local/aid/meetings/A19NASA3/Ambassador%20-%20Solar%20System%20Bodies.pdf>. Were your predictions correct? Did any of your findings surprise you?

### 5. Share what you've learned

Design and create visual art using your findings from the last four steps. Use this visual art piece to communicate what you've learned. Here are some ideas to get you started: *Make a comic book or graphic novel. Build a model of a spacecraft. Print space images on fabric and make a quilt or a pillow cover. Paint space images. Create a mobile of the Solar System. Create a game. Make a carving. Construct a sculpture.* When you have completed your visual art creation, share it with members of your family, your friends, or online.

**In order to complete this badge, send a photo of your creation from Step 5 to [ssmith@girlscoutsoaz.org](mailto:ssmith@girlscoutsoaz.org)**

Make sure to include your name in the email, and whether we can share your photo on social media!  
You can purchase Badges at our online store <https://www.girlscoutshop.com/SOUTHERN-ARIZONACOUNCIL>