



Brownie Space Science Adventurer

Pillar: STEAM

Outcomes: Display a strong sense of self

Brownies will earn their badge by investigating and learning about the Sun, Moon, planets, and stars.

1. **Meet the neighbors. Think of your home planet – Earth – as part of a neighborhood. Earth's neighborhood is our Solar System, and the other planets are the neighbors. Some planets are close, and some are farther away!**
 - a. Make a pocket Solar System. When you look at pictures of our Solar System, it can be hard to imagine how far apart the planets are. You can make a little model with just paper and pencil that will show the distances between the orbits of the planets in our Solar System. Instructions here: <https://www.pinterest.com/gprograms/brownie-resources/space-science-adventurer/>
 - b. With an adult's help, go to <https://spaceplace.nasa.gov/menu/solar-system/>
2. **See more than before. The objects in our Solar System are far away. In order to look at them in more detail, space scientists need to use tools.**
 - a. See the stars with a computer. Space Scientists use tools like telescopes to view the night sky, and they use computers too! With an adult, go to <https://earthsky.org/tonight/young-moon-beneath-venus-after-sunset-march-25-27>. What can you see? Are there any planets out tonight? What does the sky look like in other parts of the world?
3. **Investigate the Moon**
 - a. Meet the Moon phases
 1. Print and color this activity page: <https://www.invent.org/sites/default/files/file-upload/2020-03/George%20Alcorn%20Activity%20Page-noPromoCode.pdf>
 2. OR Create a Moon Phase Puzzle of your own!
<https://www.pinterest.com/gprograms/brownie-resources/badge-space-science-adventurer/>
4. **Be a stargazer**
 - a. Spend an evening in your backyard or at the park with family and just look up at the sky! You can see a lot right in the middle of a city! You'll be able to see bright stars and even a couple planets.
 - i. Make a Space Mobile - Taking the constellations and stars back to your room!
<https://www.pinterest.com/gprograms/brownie-resources/badge-space-science-adventurer/>
5. **Celebrate and share**
 - a. Plan a Star Themed Party with you and your family! Here are some fun things you can make together!
 1. Constellation Cookies - <https://www.pinterest.com/gprograms/brownie-resources/badge-space-science-adventurer/>
 2. Solar System Party Hats - <http://www.primarythemepark.com/2014/04/solar-system-activity-for-kindergarten/>
 3. Rocket Space Kabobs - <https://www.pinterest.com/gprograms/brownie-resources/badge-space-science-adventurer/>
 4. Play Some Space Themed Games - <https://cookcleancraft.com/2015/02/space-themed-birthday-party-games/>

- b. Make a cool poster or postcard talking about your favorite thing you learned! Send the postcard to a family member, friend, or other girls in your troop. Share your work on the GSKSMO Virtual Art Show -https://www.gsksmo.org/en/events/virtual_art_show.html

Online additional resources:

- <https://www.nasa.gov/specials/nasaathome/index.html>
- <https://www.nasa.gov/nasa-at-home-for-kids-and-families>
- <https://spaceplace.nasa.gov/>
- Our wonderful community partner, The Arvin Gottlieb Planetarium, has live and recorded Facebook videos studying the sky, constellations, planets, and more <https://www.facebook.com/watch/KCplanetarium/>; check them out!

When you're finished: Congratulations, you have earned your badge! You can purchase by emailing shopdept@gsksmo.org or at <https://www.girlscoutshop.com/Brownie-Space-Science-Adventurer-Badge>

No shipping charges apply at this time.

