



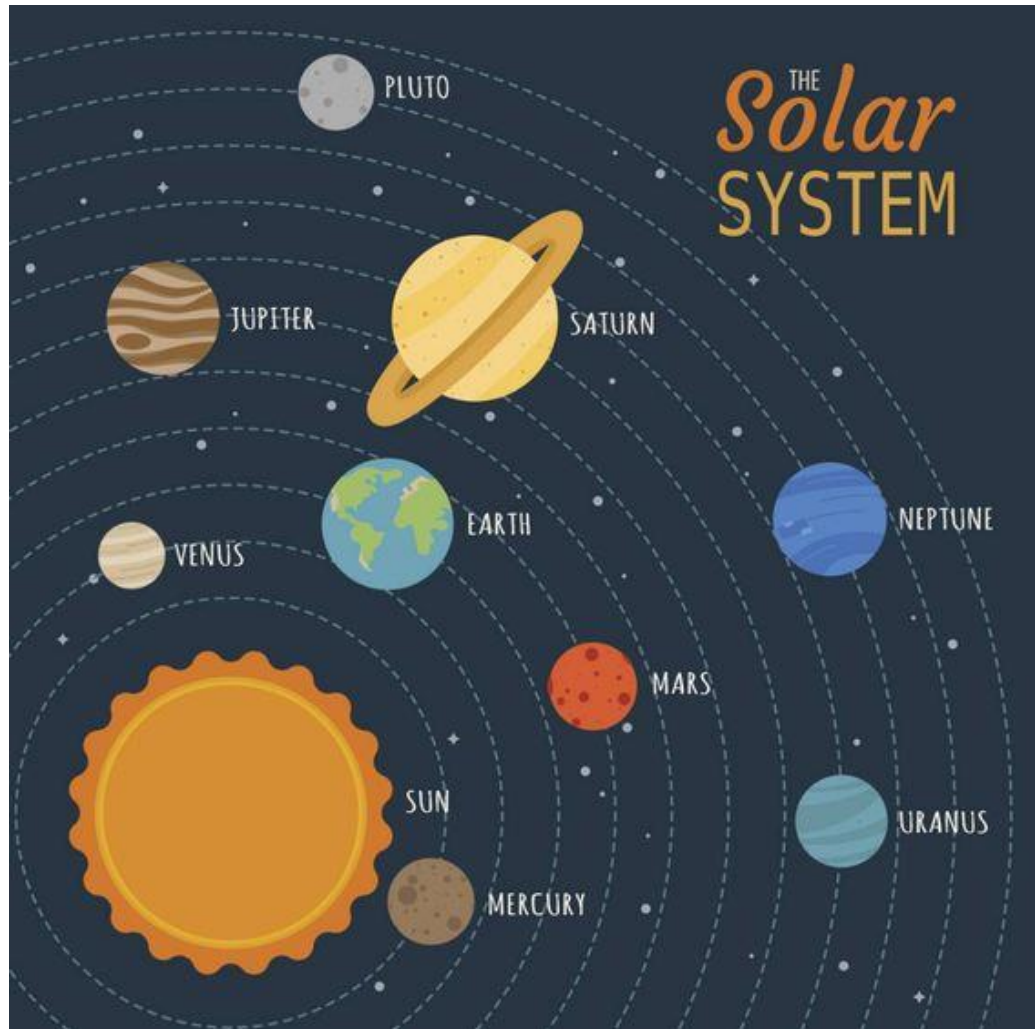
Topic: Science and Technology

Badge: Space Science

Suggested Supplies:

Steps/Activities:

- Step 1
 - Model the Solar System
 - Get to know the planets in our solar system better by making salt dough models!
 - [CLICK HERE](#) to find a simple salt dough recipe. If you aren't able to make salt dough, then you can also use play dough or simply find objects around the house to use. You can also draw out the solar system! Below is a picture of the Solar System to help you out!
 - If you can make salt dough, make them bigger and larger based on the planet. Venus will be smaller than the Sun and Saturn and the Sun will be bigger than the Earth.



- Step 2 (Choose 1)
 - Find your age on other planets
 - Your age is the number of orbits you have taken around the Sun, but each planet is a different distance from the Sun and they all go around the Sun at different speeds.
 - You can look at how old you would be on other planets by going to www.girlscouts.org/SpaceSciencePlanetAges (for extra fun you can also look at what your weight would be on other planets [HERE](#))
 - For an extra bit of fun, think about how old you will be in 10 years and write your self a letter. Ask yourself some questions or write down what you hope you will be doing in 10 years!

- Show Your Years in Pictures
 - How many trips around the Sun have you taken? What have you done in all that time? Make a scrap book of what you have done on those trips around the Sun! Include important dates (birthdays, holidays, sports games) and even important people.
 - You can use a spare notebook, a scrapbook, or just some sheets of paper! This is your scrap book and you can use it how ever you would like.
 - If you do not have pictures, then you can draw pictures of your years around the Sun.
- Step 3 (Choose 1)
 - Constellation Shadows
 - It doesn't have to be dark outside to see a constellation! All you need is a piece of paper, hole punch (scissors or something you can use to punch a hole into the paper)
 - Take a piece of paper, it can be any color, and draw a constellation on it. (Find one of Orion [HERE](#) or some Zodiac constellations [HERE](#))
 - After you draw the constellation, punch holes where the stars are. Then you can use a flashlight or candle to see the constellation reflect on a wall.
 - For extra fun, do some research to find out which constellation is yours for your zodiac!
 - Night Sky Scavenger Hunt!
 - There is so much to see in the night sky; so many stars! Find a Star Wheel [HERE](#), if you can't print it and make one, find an app that will help you see what there is to see in the night sky.
 - See what you can find on [THIS SHEET](#), and it's okay if you don't find everything. Some constellations can only be seen during certain times/seasons. You can go outside at different times of the year to see what you can find.
- Step 4 (Choose 1)
 - Mission Specialist
 - Pretend you are a travel agent for people wanting to travel to other planets, you want to make sure your customers know all their choices and what they can do on those planets.
 - Pick a planet—or two—and include facts about the planet, drawings or photos, activities you can do on those planets, and include them all in a travel brochure.

- You can do some internet research for this, [CLICK HERE](#) for one resource.
- Mars Rover
 - Nasa is exploring Mars with rovers—robotic vehicles that explore other planets and send us information and pictures/videos back to us here on Earth!
 - Your challenge is to create a model of your very own Mars rover, think about what kind of tools you will need to include on the rover, what kind of wheels will it need, will it need a satellite to send information back?
 - To help brainstorm [CLICK HERE](#) to check out and explore the surface of mars.
 - You can also [CLICK HERE](#) to learn more about NASA's missions to Mars.
 - Create a Space Show!
 - You have been learning all about the planets and the stars, and now it is time to share what you have learned!
 - It could be a rap, a skit, a song, a short story, video, or poster! Choose however you would like to share what you have learned! You can perform/present this to your family.
 - Your family can record it to share with other family members or friends!