



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences --particularly students of color and girls -- by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

Investigate stars and learn more about constellations.



Supplies Required:

- Constellation template
- Scissors
- Toilet paper roll
- Tape
- Dot sticker
- Push pin
- Small LED flashlight

Video

What are stars? <https://tinyurl.com/vnhdvh2e>

Overview

Stars are burning balls of gas that sometimes give off enough light for us to see them on Earth! During the day, the sun overtakes their light, but during the day, we are able to see them shining brightly. The sun is also a star! There are many different types of stars and you can often tell them apart based on their color. The smallest stars are red and don't give off much of a glow. Medium size stars are yellow, like the Sun. The largest stars are blue and are hugely bright. Constellations are groups of stars that form a pattern. There are 88 constellations in the sky.



Instructions

1. Cut out the the constellation circles from the template
2. Use the push pin to poke holes at each dot - these are the stars
3. Once your holes are punched, cut out the circles and affix them with tape to the top of a toilet paper roll
4. Tape the toilet paper roll to your light source and project your constellation formations on the wall.

Additional Resources

1. [Connect the dots in the night sky: https://tinyurl.com/uh9nsamu](https://tinyurl.com/uh9nsamu)

Share It Out

Share on social media: Record a video or take a picture of your activity and post the results online using the hashtags:

#StarsConstellations
#ProjectExploration
#StemAtHome

Tag a friend and challenge them to do it, too!

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634



www.projectexploration.org