

## MAKE A CONSTELLATION VIEWER

Constellations are groups of stars that people have imagined make pictures by “connecting the dots” of the stars to make shapes in the night sky. They would tell stories about the people, animals, and things they imagined were there to help them remember the patterns. Whenever and wherever there have been people around the world, there have been different constellations.

Today, the International Astronomical Union (IAU) recognizes 88 different constellations in the sky. For the following activity, visit their website and pick one out (<https://www.iau.org/public/themes/constellations/>), research a constellation from someone and somewhere else in history to use, or make up one of your own!

Take a toilet paper roll, paper towel tube, can with both ends cut off, or other opaque cylinder, and place one end of the cylinder down on a piece of paper so the end is completely covered.

Trace the outline of the cylinder on the paper to measure for your constellation, and remove the cylinder. Mark the stars that make up your constellation inside the circle.

Leaving a 2-3 inch margin outside your circle, cut out your constellation.

Carefully use a pin, toothpick, needle, or other sharp object to gently poke pinholes in the paper where your stars are marked. Make bigger holes for brighter stars!

Place the paper over one end of your cylinder, fold and smooth down the margins of paper you left along the side of the cylinder, and secure with tape or a rubber band.

Point your constellation viewer at a human-made light source (best not to use the sun, to be safe for your eyes!), and look through the cylinder. You should see the light shining through your pinholes like the stars shine at night!

You can make more than one constellation using more pieces of paper and swap them out on your viewer.

What is the mythology (or story) behind your constellation?

