

Family Day Art Activity:

Make a Constellation Projector

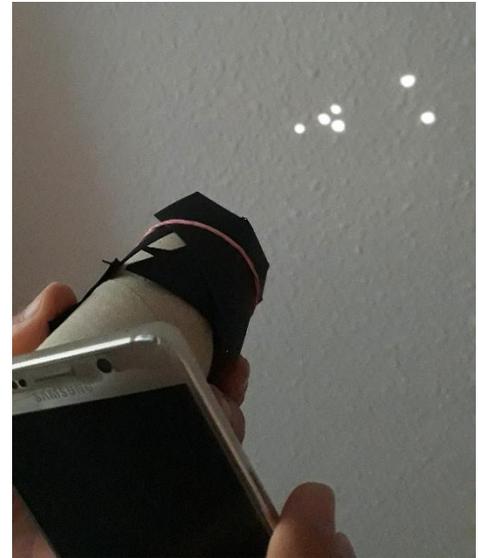
Time: 10-15 minutes

*Adult supervision recommended as there are sharp tools involved in the activity

Stars have dazzled and guided people for thousands of years across vast seas and lands and helped predict seasons. To make sense of the millions of stars in the sky, people started forming patterns and naming groups of stars based on gods, hunters, princesses, objects and mythical beasts. These patterns of stars as seen from the earth are called constellations. Learn more about constellations by making your own constellation projector!

What you will need

3. Printed Constellation Patterns
4. Toilet Paper Roll (or Kitchen Paper roll)
5. Dark paper Pencil
6. Glue stick
7. Scissors
8. Paper Clip*
9. Rubber band
10. Light source: Flashlight (or phone flashlight)

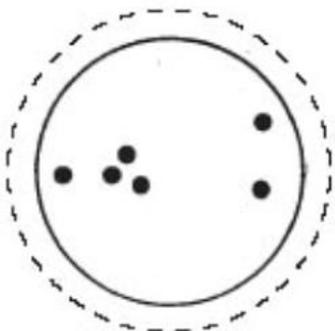


Instructions

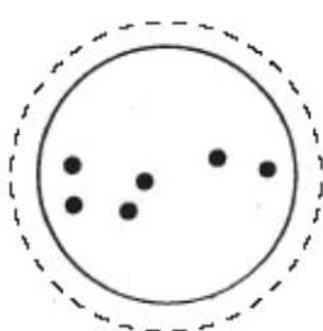
1. Cut out each constellation pattern (below) in circles
2. Glue the constellation pattern on top of the dark paper
3. Cut a square around the pattern leaving at least an inch from the circle's edge
4. Cut slits in the dark paper up to the circle's edge so that it may fold down better over the toilet paper roll
5. Write the name of the constellation on the other side of the paper so you can keep track of which is which
6. Place the constellation pattern on top of the toilet paper roll opening and fold down the dark paper
7. Puncture the dots (representing stars) with an opened paper clip*
8. Secure the pattern over the toilet paper roll with a rubber band
9. Flash a light through the open end of the toilet paper roll in a dark room to see the constellation projection!
10. Optional: Try finding more constellation patterns or designing your own to project!

----- Cut paper here -----

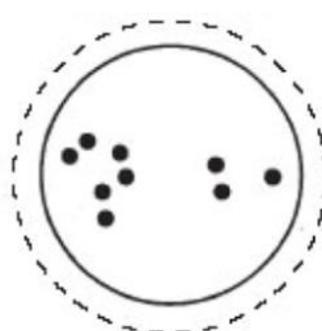
The constellation patterns below are reversed so that they project accurately



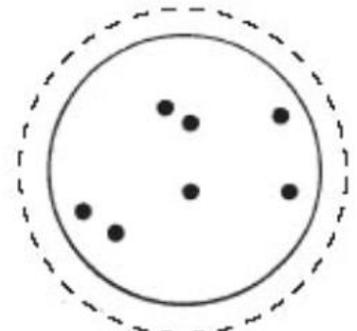
Taurus
(The Bull)



Ursa Major
(The Great Bear)



Leo
(The Lion)



Pegasus
(The Flying Horse)