

Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! You can do these fun science activities using commonly found items. You can also visit us at the Museum's [Science at Home](#) page for additional resources.

Constellation in a Jar

Do you have a favorite constellation or just like finding shapes in the stars? Here is a way to capture the star patterns in your own home.



Materials Needed:

- Glass or plastic jar
Wide mouth jars are better
- Aluminum foil
- Light source that fits in the jar
Battery powered LEDs work well
- Scissors
- Pencil for making holes
- Constellation patterns

What We've Learned

Constellations are groups of stars that form a recognizable pattern. Most constellations are given names for the mythological creatures they represent. Within each constellation are named, recognizable stars used for navigation and orientation. Before GPS, travelers and explorers needed the stars to navigate and orient their journeys. Polaris, the North Star, is not the brightest star in the sky, but is easy to find. This makes it a reliable orientation point for travelers. To find Polaris, find the Little Dipper: the very tip of the "handle" is the North Star.

Instructions:



Step 1: Estimate the amount of aluminum foil (*height and width*) needed to line the inside of the jar—wrapping the aluminum foil around the outside and cutting to length works well.



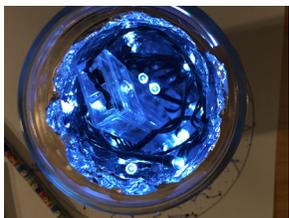
Step 2: Place your constellation map or image over the aluminum foil and poke holes where the star marks are (*use cork or other soft backing to prevent scratching your table*).



Step 3: Check to make sure your poked object is doing its job. If you like your constellations so far, you can use a small toothpick to make smaller holes as background stars.



Step 4: Loosely roll the aluminum foil and place it inside the jar, smoothing it to the sides with a pencil and pen.



Step 5: Place the light source inside the jar and put the lid on.

Everyday Connections

Constellation names come from the animals or people they represent. Ursa Major is "the Great Bear" and Leo is "the Lion." Orion is the tall hunter holding a bow; most easily found by looking for his belt—the 3 bright stars in the southeastern sky.

Having Fun?

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