There are a few hundred billion stars in our galaxy with each star being about 1-10 billion years old. When stars are grouped together, we call them constellations. Hundreds of years ago, before humans even knew what stars were, they made up stories about the shapes they would see in the night sky. One of the most famous constellations is Orion, a legend of a mighty hunter that comes from Greek mythology. You may have seen part of the Orion constellation known as Orion's belt, a smaller grouping of three stars in a row, in the night sky! In this activity, you will be creating your own constellation and build a tool to view it inside your own home!

Materials:

- Styrofoam or Paper Cup
 Pencil
 Flashlight

- Black Marker
 Toothpick
 Piece of Paper



Procedure:

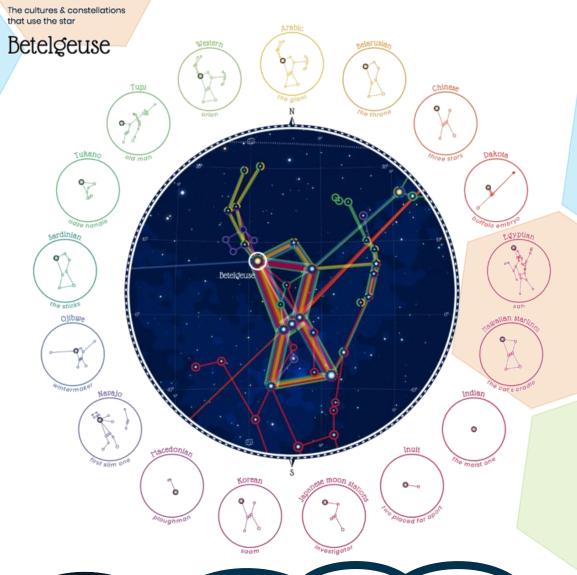
- 1. Draw a picture of your own constellation. Start by drawing a picture of the thing itself, like an animal or person. Next, draw dots on your constellation to represent the stars.
- 2. Draw an outline of your constellation with the stars only.
- 3. Using the black marker, color the bottom of the cup.
- 4. Using a toothpick, poke holes in the bottom of the cup to represent the stars in your constellation.
- 5. Turn off the light and place a flashlight inside the cup. Watch as the light projects "stars" onto your wall!







What happens when you shine the flashlight through your cup? You have made a new constellation! In different cultures all around the world, constellations are used for a lot of different reasons like as a calendar, but many constellations also have a story attached to them. Look at the picture below to see how one star is used in many different constellations around the world.



DID YOU KNOW?

An astronomer is someone who studies everything outside of our planet, Earth. They study the stars, planets, moons, comets and galaxies. If you liked exploring this activity, maybe astronomy is for you!