## **MATERIALS LIST:**

- Cardboard tube
- Thin cardboard (cereal, cracker or tissue boxes work well)
- Mail envelope with plastic viewer (the plastic works great for tracing!)
- Scissors
- Pencil
- Marker (permanent preferred)
- Ταρε
- Push pin/thumb tack
- A picture of a constellation



## WHAT'S IT ALL ABOUT?

Constellations are groups of stars that, when viewed from Earth, look like they make a pattern or a picture. Think of it as celestial connect the dots! Cultures across the world have looked to the sky and seen different pictures in the stars.

#### **TRY THIS**

In some cultures there are stories that go along with the constellations. Can you find a story to go with the constellation you picked for this activity?

Take your Constellation Viewer into a dark room. Put a flashlight at the open end of the tube and use it to project the constellation onto a wall or ceiling.

# **Constellation Viewer**

### **PROCEDURE:**

Have science fun as a family! Complete activities with parental supervision.

- 1. Select a constellation- your favorite or research a new one!
- 2. Place the cardboard tube over the plastic viewer of the envelope and trace around the tube (see left image, below).
- 3. Draw the stars of your constellation on the plastic viewer with a pen or permanent marker (see center image, below), by freehand or trace it.
- 4. Place the plastic viewer with your marked constellation over a piece of cardboard and, using the pencil or pen, press on each of your "stars" to make bumps in the cardboard (see right image, below).







- 5. Being careful of your fingers, press a push pin into the cardboard where you marked the stars. Wiggle the pin around a little bit to make a nice clean hole.
- 6. Draw a few tabs around the outside of the circle. These tabs will make it easier to tape the disc on to the end of the tube (see left image, below).
- 7. Cut out the cardboard disc and tabs.
- 8. Fold the tabs over the end of the tube and tape them in place (see center image, below).
- 9. Tape all around the edge of the disc to firmly attach it to the tube. Look through the tube and you'll see your constellation! (see right image, below)







10. Be sure to take a picture to share in the Facebook comments on the Buffalo Museum of Science or Tifft Nature Preserve pages!