

CONSTELLATION TUBES

Overview



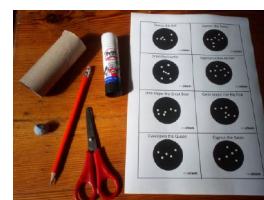
Do you want to look at the stars but don't own a telescope? Make a constellation tube and you can see the stars whenever you want to. All you need is a cardboard tube, a sharp pencil, scissors, glue and our constellation printout.

[Printable version](#)

This page will print, but it doesn't look great. Click the button above for a print-friendly PDF version.

[More STEM at Home](#)

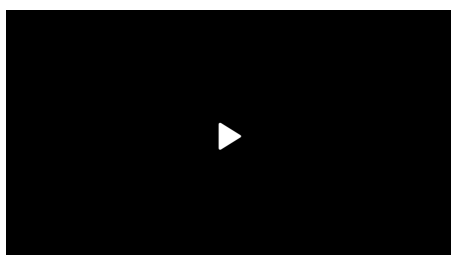
What you'll need



- A toilet or kitchen roll tube or rolled up piece of card or paper
- A print out of our [constellations sheet](#)
- Scissors
- A sharp pencil, pen or skewer to make holes
- A small lump of sticky tack, playdough or plasticine to help make holes
- Glue or sellotape

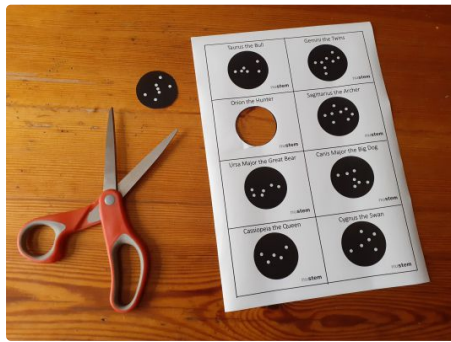
What to do

Step 1



Before you start, you may want to listen to the story on the left called Look Up by Nathan Byron. The story is about a young girl who spends her days dreaming of the stars and sharing her passion with anyone she meets.

Step 2



Print out the constellation tube sheet.
Choose a constellation pattern and cut it out.

Step 3



Use your pencil or skewer to poke through the star into your sticky tack to make a hole. Continue to poke through all of the stars in your constellation pattern.

Step 4



Glue on top of the rim of one end of your tube and stick the constellation pattern in place.

Step 5



Now look through the open end of your tube to see your constellation.

Things to discuss

- Glue or sellotape

Duration

10 minutes or so.

Suitable for...

Age 3 and up.

Safety notes

You know your children better than anyone, and you should judge whether they're ready for this activity. You might want to think in particular about:

- Supervision: a sharp pencil or scissors could cause injury.
- Glue can damage carpets.

Careers Link: The Astronomer

Astronomers are a type of scientist that study objects in space. They use telescopes, satellites and spacecraft to collect data and use this to help us understand events in the universe. Visit our [Astronomer activity page](#) for more information and activities.

Attributes: open-minded, self-motivation and patient.



Things to discuss

- Can you see the light clearly through your holes?
- What happens if you make bigger or smaller holes?
- Look at the names of your constellations. Does the pattern you have created look like an animal or person?

If you become an astronomer, you might work in an observatory like this one in Kielder.

How it works

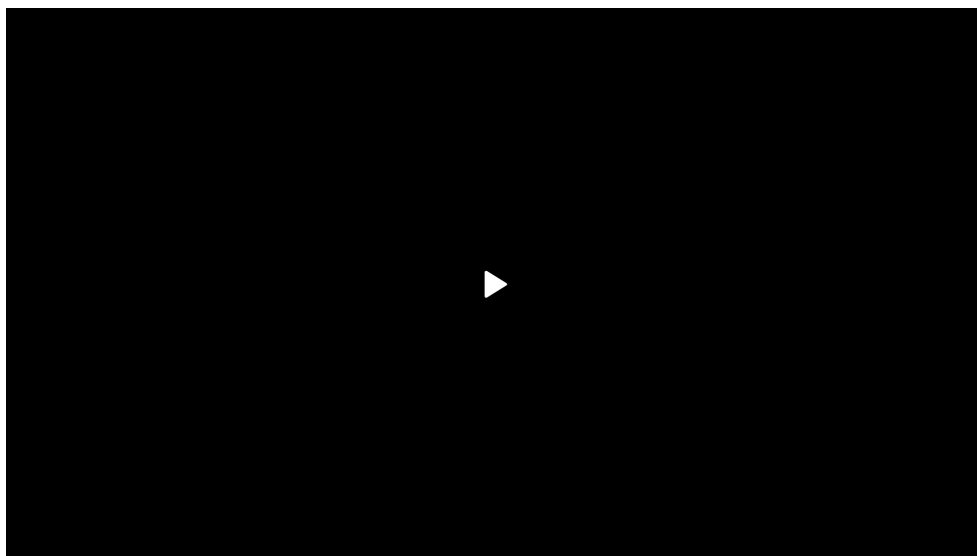
In ancient times, people saw patterns of stars in the sky and told stories about them. You may have heard of some of these, such as Orion the hunter, Gemini the twins, or Taurus the bull.

Different cultures had different stories about the constellations.

Younger children might enjoy the song below which tells you all about this. When astronomers made maps of the stars they included these patterns on their maps and called them constellations.

The individual stars in a constellation may appear to be very close to each other, but they can actually be separated by huge distances in space and have no real connection to each other at all.

Different constellations can be seen depending on where you are on the Earth and different constellations can be seen at different times of the year.



Other things to try

Project your stars!



If you have a torch, you can shine this into the open end and project your constellation onto a wall.

Online planetarium

Click [here](#) to visit an online map of the sky that will show you what you can see in the sky right now. You can change the location so that the planetarium shows you the sky above your house. You could also watch the video below to find out about the night sky. Use this to help you spot stars and planets from your back garden.

