

PINHOLE CONSTELLATIONS

YOU WILL NEED

Cardboard tube (you can make one)

White paper or print a template

Scissors

Pin

Modelling clay (or something to make small holes safely)

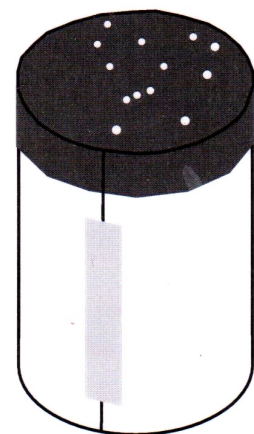
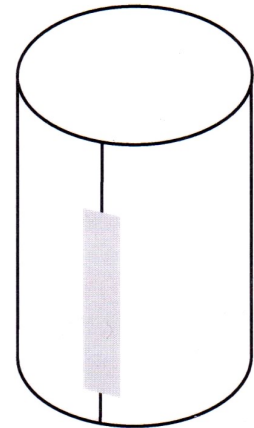
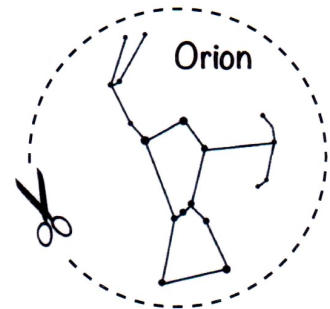
Sticky tape

Gaffer tape/cloth tape

Pencil

HOW TO MAKE ONE

1. Cut out the template of your chosen constellation.
2. Take a cardboard tube or roll the strip of thick white card into a tube that fits your template. Fix white card with sticky tape to hold tube shape.
3. Cut a strip of gaffer tape and lay it on the table sticky side up. Place your circular constellation on the gaffer tape face up. If you don't have black gaffer tape use black card, paper or anything that will stop light getting through).
4. Use a pin to carefully poke through the star dots that make up the constellation. You can use different sized pins or a toothpick to make holes of different sizes to match the stars brightness. Put some modelling clay underneath the constellation to push the pin into.
5. Place the cardboard tube over the constellation and pull the gaffer tape tightly over the end of the tube. Add more gaffer tape if necessary to cover any unwanted light.
6. You can decorate the outside of the tube!



HOW TO VIEW

METHOD 1

Hold the tube up to the light and look into it.

METHOD 2

Take your pinhole constellation to a dark area, aim it at a flat surface and shine a torch into the tube. This will project your constellation.

DID YOU KNOW?

Not all constellations are visible in all places at all times of the year. The time of the year and the Earth's rotation affects which constellations are visible on any given night when looking at the night sky.