

STAR PROJECTOR

QVMAG is home to the Launceston Planetarium.

Make a star projector
to look at star
patterns on your
ceiling or wall at home.

What you will need

- Cardboard cylinder from cling wrap or paper towel
- Aluminium foil
- Scissors
- Pen
- A 15cm x 15cm piece of cardboard (to stop the pin scratching the table, etc. when you make holes in the foil)
- Rubber band
- Pin (a push pin is the safest)
- Pictures of star patterns to copy (the Southern Cross and the Saucepan are shown below).



What to do

- Cut a square of foil 2-3 times as wide as the cardboard tube
- Place the foil on top of the cardboard
- Place the end of the cardboard tube on the foil and lightly draw a circle to show the size of the tube
- Use the pin to pierce holes in the same pattern as the stars (make sure you stay inside the circle)
- Put the cardboard tube on top of the circle and fold the foil up the sides of the tube

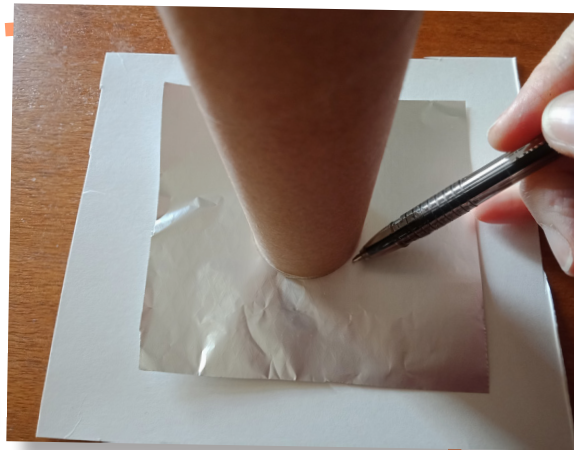
- Use a rubber band to keep it on tight
- With all of the lights out and curtains closed, shine a torch* in the open end of the tube to see the stars on the ceiling or wall. A white wall or ceiling works best.
- Try making one or two of the holes a little bigger and see what happens.



The torch needs to be small enough for all of the light to be inside the tube. The torch on a smartphone works well, a multi-bulb LED torch does not work very well as it has too many points of light.



1. Cut a square of foil and place it on cardboard



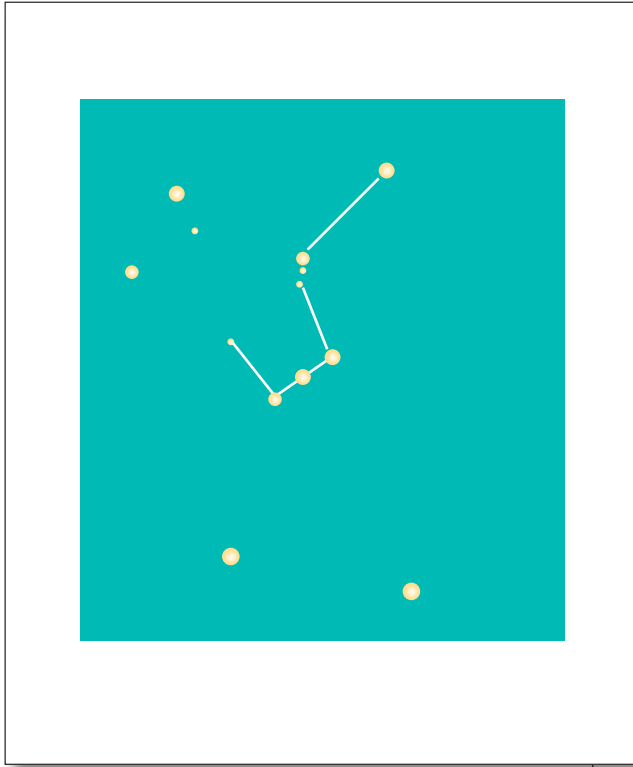
2. Lightly draw a circle on the cardboard



3. Use the pin to pierce holes in the same pattern that is made by the stars



4. Attach foil over the top of the cardboard and secure with a rubber band



The Saucepan



The Southern Cross

Take it further

QVMAG has a Planetarium which uses a special projector to show stars, planets and the Moon on the dome ceiling. It can make the stars move as if time is passing.

Look up star charts and find more constellations and star patterns, and make more star projectors. Make sure you search for constellations and star patterns visible from the southern hemisphere.