



How to build a pinhole projector.

By solar scientist and presenter Dr Lucie Green.

Watching a solar eclipse with a pinhole projector is one of the safest ways to see the Moon pass in front of the Sun.

It's easy to make a pinhole projector using things you'd find round the house; like a long cardboard box and white paper.

The length of the box will set the size of the projection – the longer the box; the larger the image of the eclipse.

Take a sharp knife and carefully cut a rectangular hole into one end of the box.

Then using a pair of scissors, cut a rectangular piece of kitchen foil. This should be larger than the hole you just cut into the box.

Now tape the foil smoothly over the hole and use a drawing pin to poke a tiny hole in the centre of the foil.

Finally, take a sheet of white paper and tape it inside the box at the opposite end to the foil.

Voila – your projector is ready.

Be sure to try out your projector well in advance of the big event.

Aim your box so that the pinhole is pointed at the Sun - but be extremely careful to avoid looking directly at the Sun, as this can damage your eyes.

Adjust your position until you see the Sun's image on the paper.

Now you're ready to safely watch a solar eclipse!