

SECRET YETI AGENT CHALLENGE SIX

MAKE A MAGNIFIER



Make this lens together and use it to look for differences in the shape of your fingerprints. Try using the lens with other tiny things too you find in the house or garden.

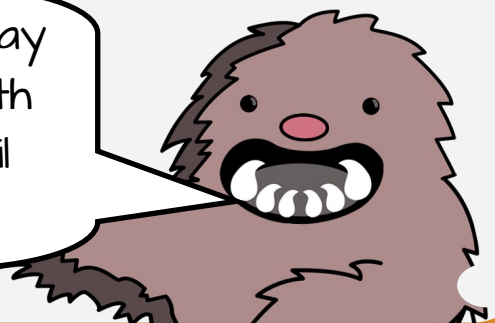


You will need:
a clear plastic 2L bottle,
a marker pen,
a pair of scissors,
and a little water.

Draw a circle on the
bottle with your
marker pen at the
top where the
shape curves.



Carefully cut out the circle. (you may need help with this bit). Then smooth the edges with sandpaper or a nail file to smooth any rough bits.





Put a little water inside the disc. You can experiment to find the right amount for your magnifying lens.

Try your magnifier with your fingerprints or other small objects to make them look bigger.



The Science Bit ...

The disc of plastic that you cut from the bottle curves outwards. This is called a **CONVEX** shape. When you add water to the disc the light that passes through is bent inwards (it is **REFRACTED**) and this enlarges what is underneath.

You have created your own version of a magnifying glass!

Try your magnifying glass in the garden or other outside space where there are all sorts of interesting things to take a closer look at.