2D to 3D Paper Baubles

Maths involved: 2D and 3D shapes

In this craft activity, we will be transforming 2D paper circles in to 3D baubles!

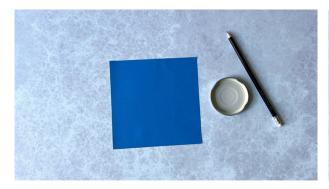


You will need:

- Coloured paper
- A Pencil
- A pair of scissors
- Glue
- Some wool or string
- A circular object with ca. 6cm diameter to draw around, e.g. the clean lid of a jam jar

Step 1: For each bauble, you will need to cut out four circles of the same size from your coloured paper. Depending how thick your paper is, you can fold the paper to cut out several circles at once.

TIP: 15cm square origami paper is perfect for this, which is what we used. Folded in half twice, it is just the right size for an average sized jam jar lid to draw around, giving four evenly sized paper circles.



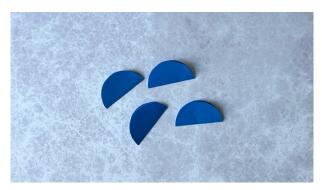






Step 2: Once you have cut out your four circles, fold each of the circles in half.

Step 3: Glue one of the folded circles halves on to another folded circle half. Repeat the same with the other two folded circles, so that all four folded circles are glued together on top of each other.





Step 4: Cut a piece of string, about 2.5 times the length of the edge of the folded circles. Fold the string in half and tie the ends together.

Step 5: Unfold the bottom circle, and apply glue to the surfaces of the two circle halves facing you. Lay the folded piece of string along the middle of the two halves, with the knot sticking out on one side, and the folded loop of the string sticking out at the other side.

Step 6: Press the two circles halves with the glue together around the string.

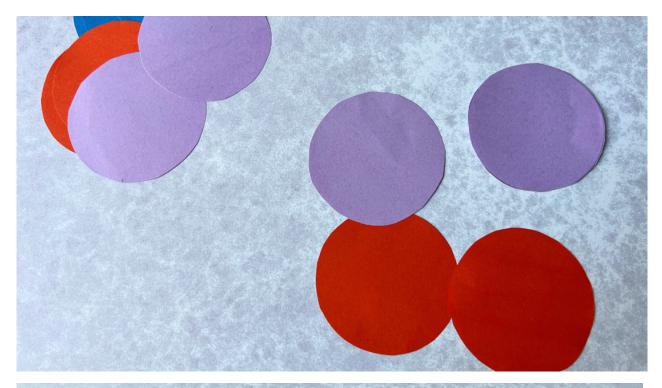


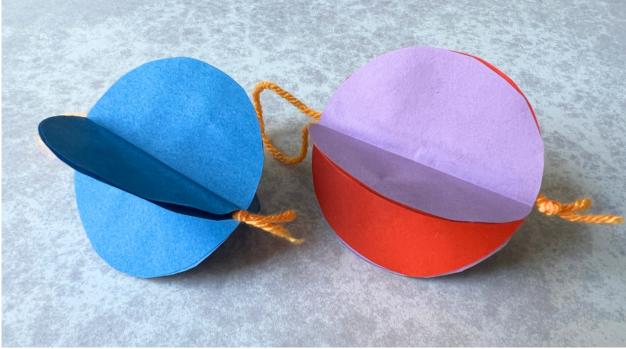


Congratulations – you have turned your 2D circles in to a 3D bauble. You can now hang up your bauble by its loop!

Variation:

Instead of using the same colour for all your circles, you can use two to four different colours and make a multi-coloured bauble.





Taking it further:

Experiment with using a different number of circles. What is the minimum number you need to make your bauble 3D? Is there a maximum number of circles you can use?