Cellophane Stars

Maths involved: Symmetry, angles, shapes

In this activity, we are folding a star wall or window decoration. All you need is some cellophane paper, a pair of scissors, and a glue stick.

Step 1: From the cellophane paper, cut out eight rectangles that are all the same size. You can use all the same colour or a combination of different colours. The rectangles we used here are 24cm x 10cm, which is quite a big star. You can make them smaller, but try to keep the same size ratio.



Step 2: Take one of the rectangles and fold it in half lengthwise, then unfold again leaving a crease down the middle.



Step 3: Take each of the four corners, and bring them in to meet the middle crease, then fold them down.

Step 4: Now take the sides at ONE END ONLY and fold them in to meet the middle crease again.



Repeat steps 2 - 4 with your remaining seven rectangles.



Step 5: Glue the pieces together at the ends that have only been folded once, so that each piece aligns with the middle crease of the piece before.



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Keep layering the pieces on top of each other, until you get to the last piece...



Step 6: When you slide in the last piece, it sits above one of its adjacent pieces, and underneath the other.



And you're done! This is what your finished star should look like. Depending on the age and number of children, you can cut up the rectangles in advance and let the children do the folding and gluing, or you can let them measure and cut the rectangles themselves.

Some questions to think about:

Look at your folded star. Can you spot another star? How many points does each star have? Is the shape of the stars the same or different? What other shapes can you see? Did new shapes emerge as you put the star together? Can you spot any lines of symmetry? Can you spot any right angles? How about acute or obtuse angles?