

Fantastic Folding

You need: 30 squares of coloured memo cube paper, glue, a classmate

ACTIVITY

Lome's class have been making the 5 Platonic solids. By replacing each face with a point, these 5 regular solids can be changed into star-like (stellated) shapes.

Follow the instructions to make your own stellated icosahedron.

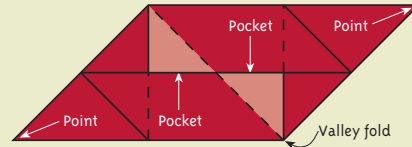
(An icosahedron has 20 sides.)



Plato and his solids



1. Fold 30 memo cube squares as for Cute Cubes. Give each piece one extra fold, a valley fold, as in the diagram. Use 6 different colours, A–F. Make a set of 5 of each colour.



In the photographs, A = red, B = yellow, C = purple, D = blue, E = orange, and F = green.

2. Use the A pieces to make a “rosette” by pushing the point of each piece into the pocket of the next.

3. Push the points of the B pieces into the remaining A pockets (near the centre of the rosette). Bring the A points around and tuck them into the B pockets.



4. Push the points of the C pieces into the remaining B pockets and the points of set D into either pocket of set C. Tuck the B points into the D pockets and the D points into the C pockets.



5. Push the points of set E into the remaining D pockets. Tuck the C points into the E pockets.

6. Push the points of set F into the remaining E pockets. Push the E points into the F pockets and the remaining F points into the remaining F pockets.

