



**Advanced Mathematics
Support Programme®**

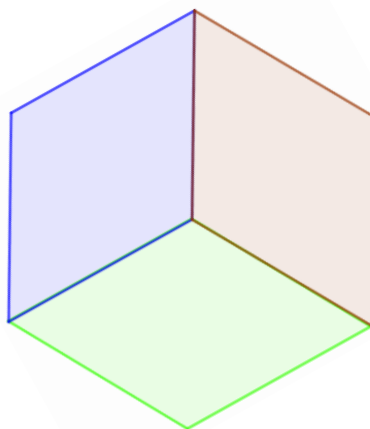
Victor Vasarely & Optical Art

Victor Vasarely

- Victor Vasarely was one of the most influential figures in Optical Art.
- He was born in Hungary in 1906, but moved to Paris in 1930.
- He drew lots of different designs with optical illusions – these were predominantly 2D images made to look 3D.
- The images we will be looking at will be based on his ‘Homage to the Hexagon’ series.

Starting image

- Vasarely built his images up with these shapes. What shapes can you see?



- Stare at the central vertex. Can you make the image change, popping in and out?

Victor Vasarely's first work in 'Hommage to the Hexagon'



- What shapes can you see?
- Do you think the title is appropriate? What would you have called it?
- How would you build this shape in 3D?

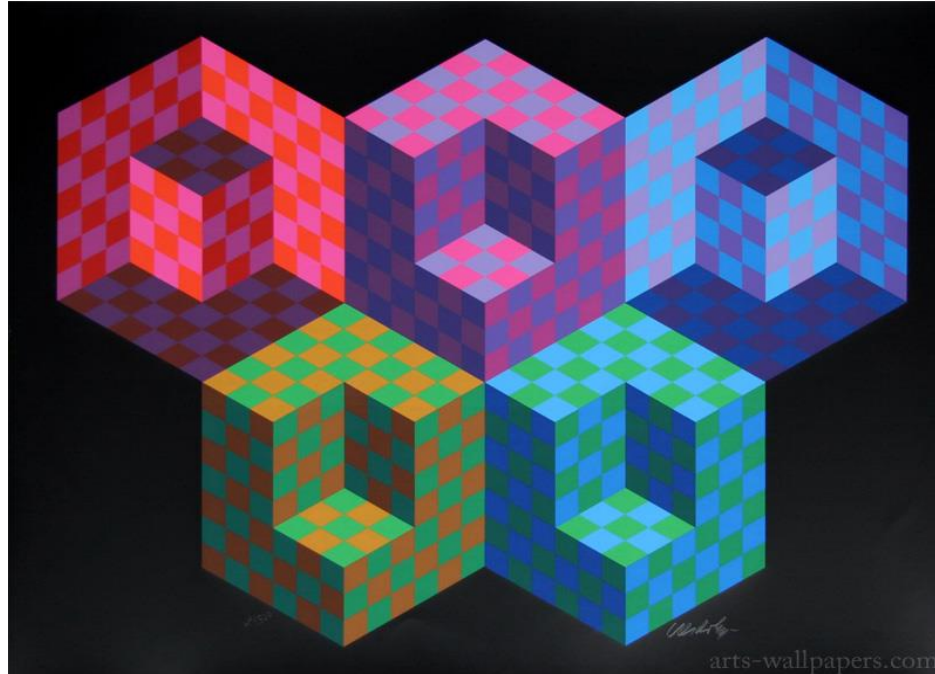
Different works

- Here are a selection of different works that Vasarely made in his hexagon period.
- Can you see how he designed movement?



Your turn

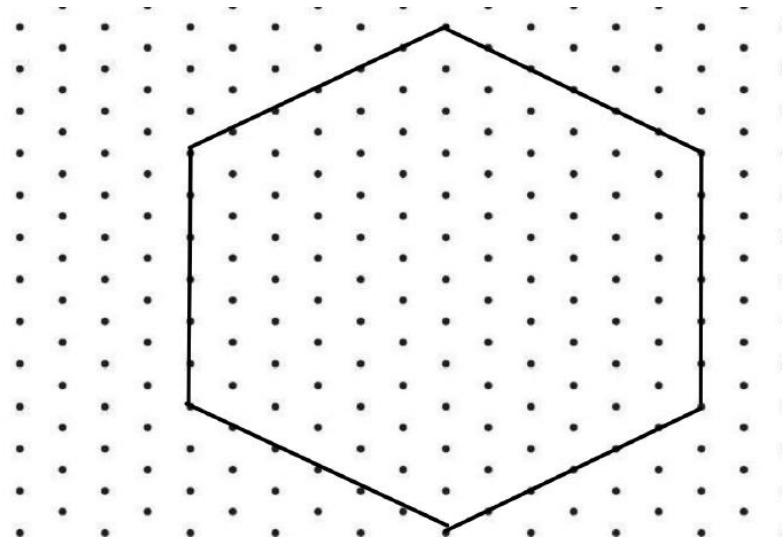
- We're going to make a picture like this



- The instructions are for one unit, but either you can make many different units and stick them together, or your class members can make one each and then all combine to make one huge picture?

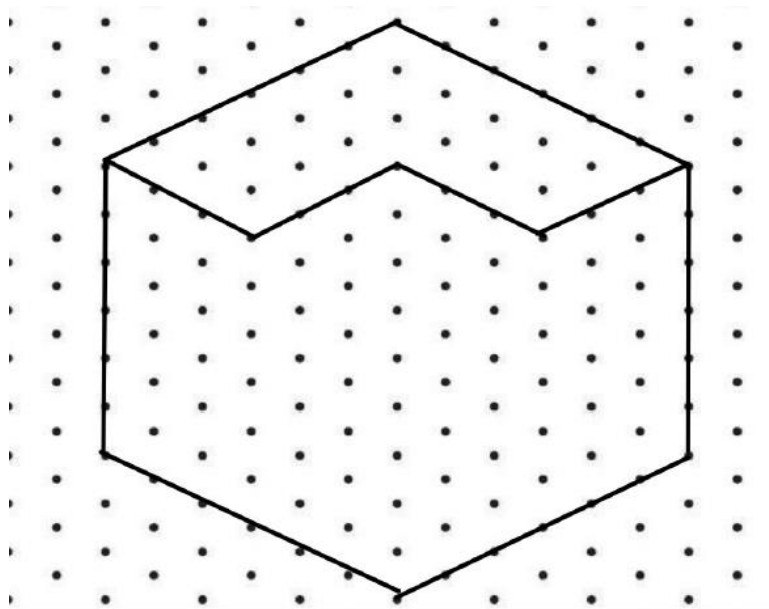
Step 1

- With your isometric paper lined so the dots are in vertical lines, draw a hexagon with each edge 6cm long



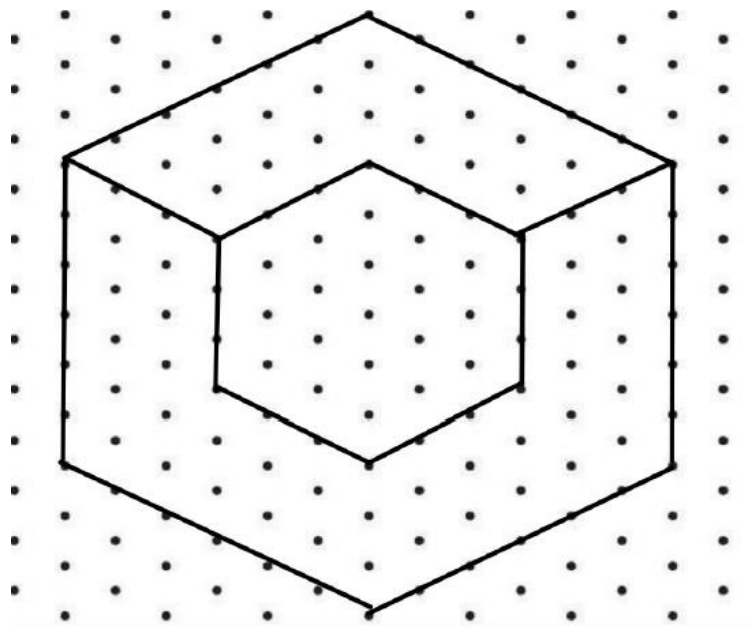
Step 2

- Draw an L shape on the top face, with the shorter sides 3cm in length



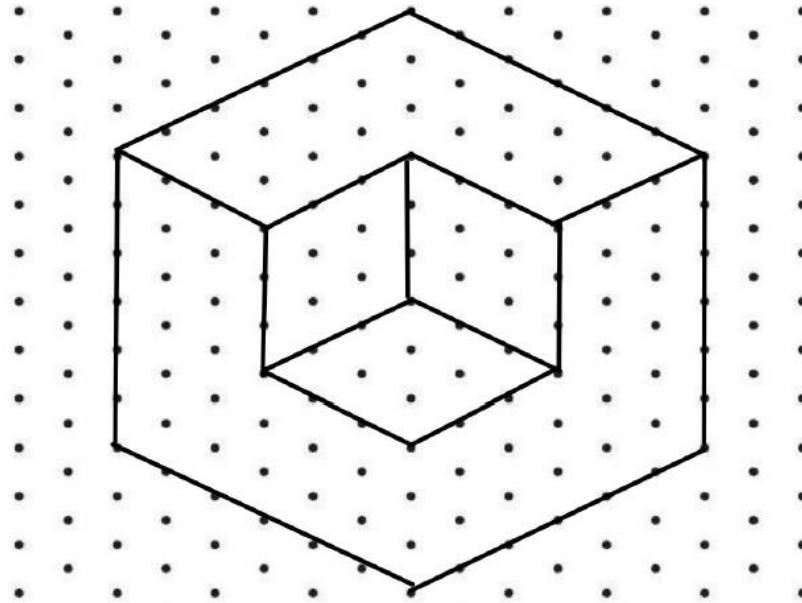
Step 3

- Make a small hexagon down from the top 'L', 3cm in length



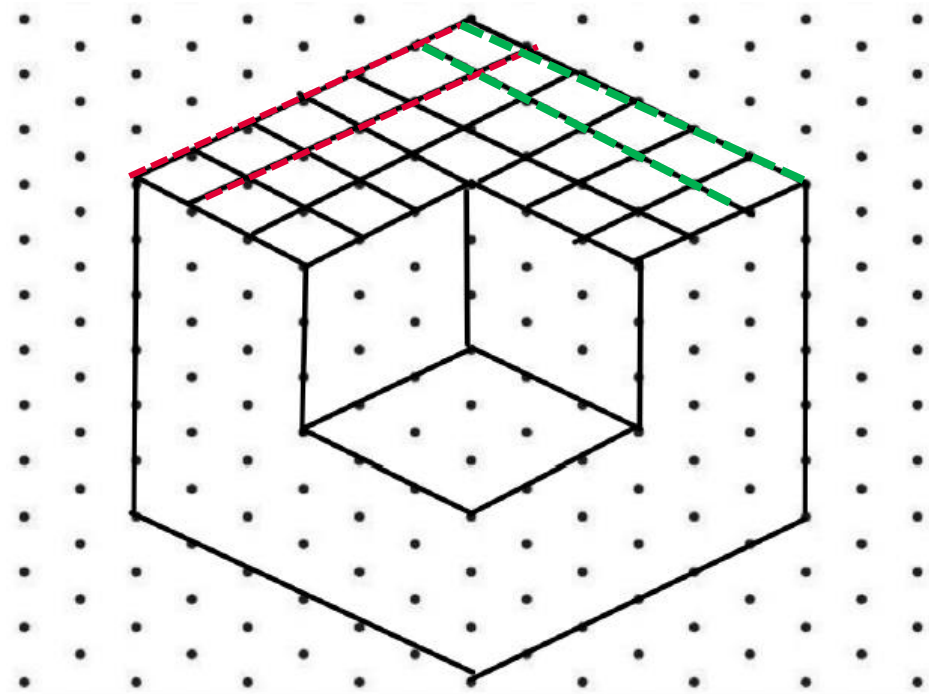
Step 4

- Turn the inside hexagon in to a cube, using an upside down 'Y', all lengths 3cm



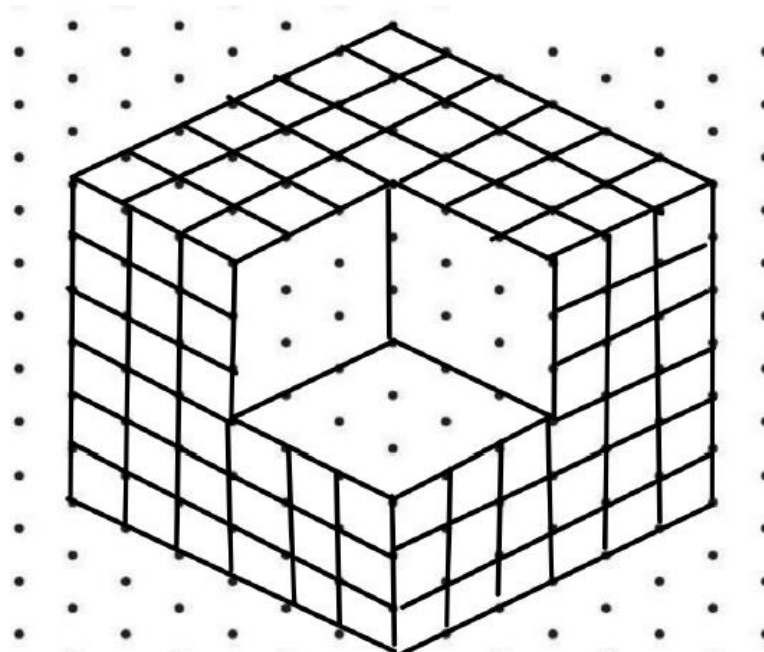
Step 5

- Add the individual squares/rhombus' on the faces. Ensure the lines you are drawing are *parallel* to the outside edges of the face



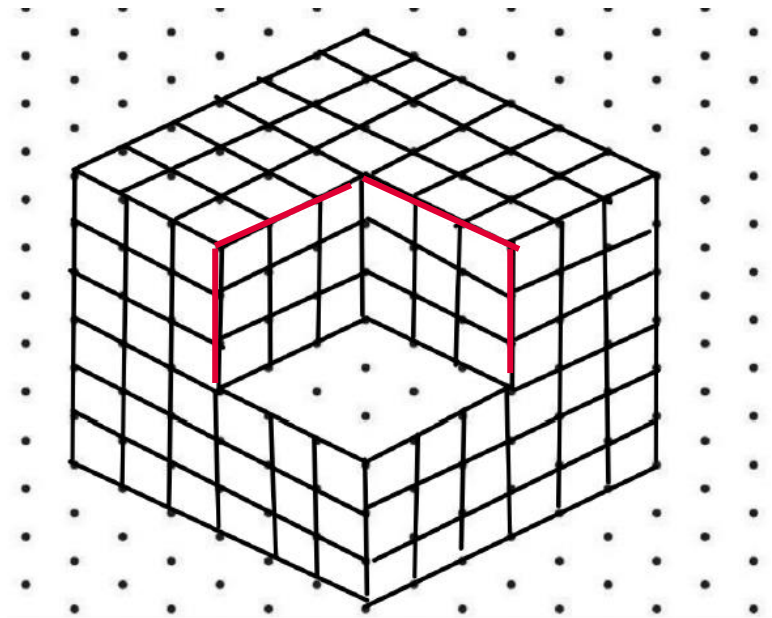
Step 6

- Continue the edges for the remaining outside faces.



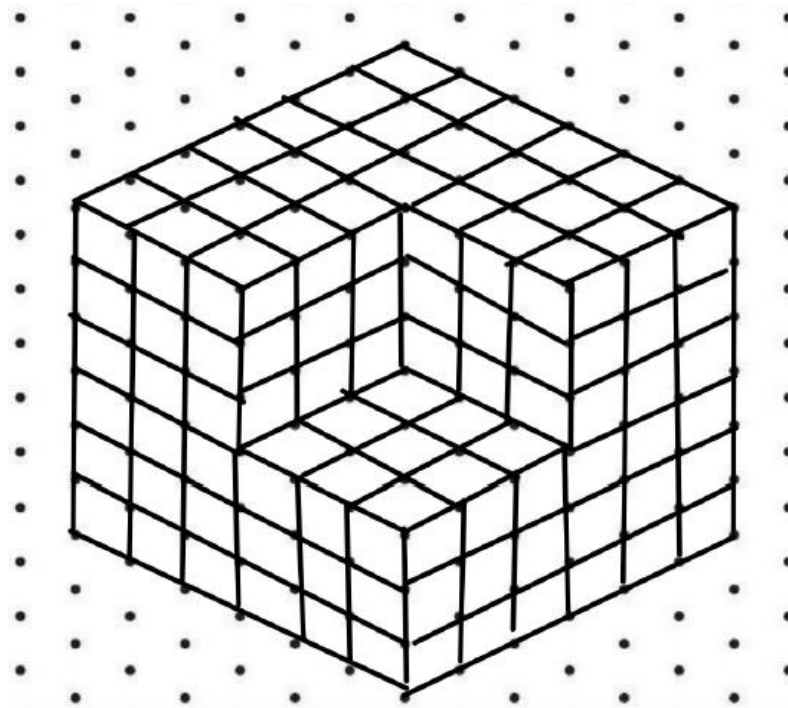
Step 7

- Add the edges on the inside faces. Ensure the lines change direction at the edges from the outside faces to inside faces



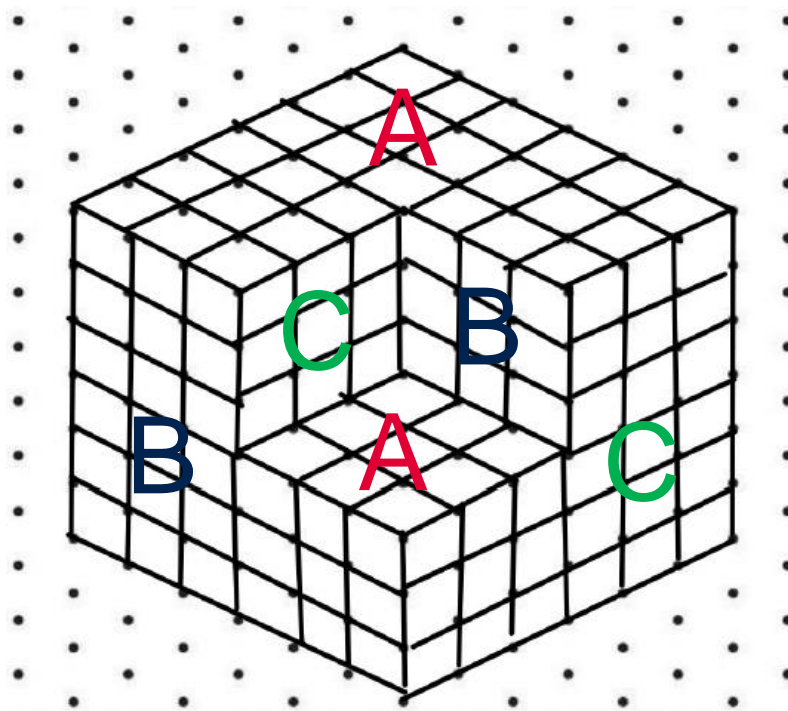
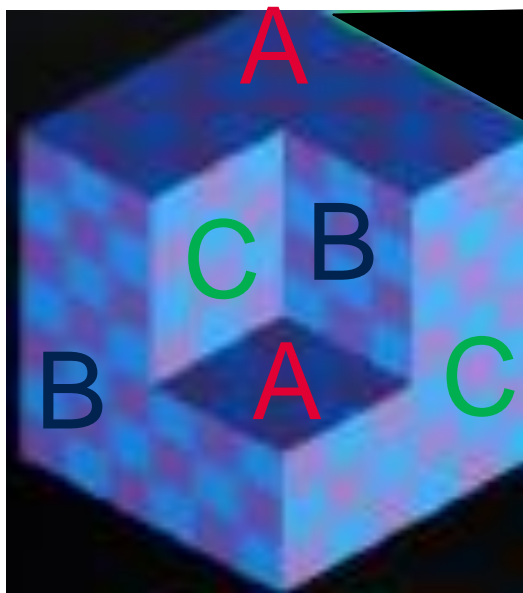
Step 8

- The final face! Now your shape is ready for colour to be added!



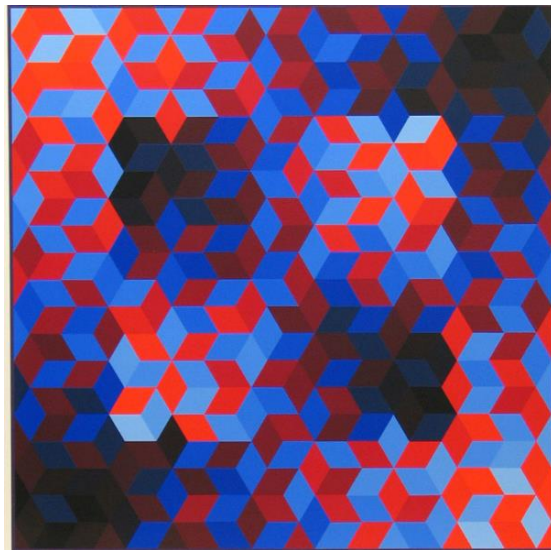
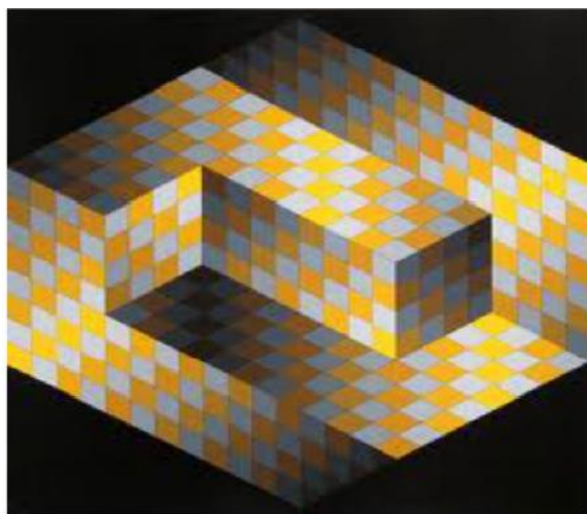
Adding colour

- For this image, Vasarely used two shades for each cube shape, but he made the parallel faces the same colours. Varying the tone of the colours adds to the illusion



Other ideas

- Isometric paper can be used to make lots of different Vasarely images
- Here are some others for you to copy– or you could create your own!
- If you do create your own, think about how he created movement in a 2D shape.



Combining pictures

- You can combine images together as seen below.
- These images have been handdrawn or created in geogebra.

