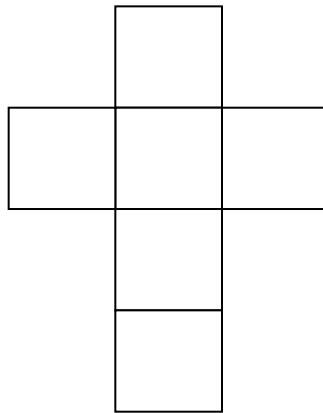


Cutting a Cube

Level C

When you cut a cube into one flat piece, we call that piece a **net**. The reason we call it a net is because we can trace the pattern of the flat piece on a piece of paper or cloth material. If we cut out the pattern, we can fold it back over the cube, surrounding it like a net.

The nets that cover a cube can be cut into different patterns. One net looks like a cross. It has four faces in a column and two more faces on either side of that column. How would you cut the cube (which edges) to make the net into a cross pattern? Is there more than one way to cut the cube to make a cross?



Find some different net patterns that would also cover a cube. Determine how you would have to cut the cubes to make them into new net patterns. Explain your methods.

Are there ways to cut the cube so that it won't make a net? Explain your thinking.

Sometimes you might think two nets are different, but if you move one around, it then looks exactly like the other net. How can you tell if two nets are different? Explain and define the difference.

