Boxes of Tricks

You need / square grid paper

scissors

isometric dot paper

tape

Activity One

This shape has been made by joining five squares side to side. It is called a pentomino.

Do you know why?

This pentomino will fold up to make a cube box with no lid (an open cube).

Will this pentomino fold to make an open cube? Cut it out of squared paper to find out.

How many different pentominoes can you make?

Which ones fold up to make open cubes?

Which ones do not?

Activity Two

Here are four triangles joined side to side:

4.

5.

How many different shapes can you make by joining four triangles side to side?

A tetrahedron is a solid shape made from four triangles.

Which of your shapes fold to make a tetrahedron?

Cut them out of isometric dot paper to find out.

tetrahedron

8

Making nets for three-dimensional solids