Task notes | Boxes of tricks

Notes for parents. Activity next page.

The purpose of this task is to help your child:

learn to make nets (flat plans) for solid objects

Think about this:

- It says they need square grid paper and isometric dot paper. You probably don't have these at home, so instead they'll need a pencil, paper and a ruler. Some careful measuring on their part, will also be needed to make their nets.
- When it says to 'join your triangles side to side,' encourage your child to try different ways, not just the one way shown in the picture.
- Encourage them to talk with you about what they are doing (rather than with a classmate). You might like to try making nets too, and have some fun with shapes.

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.

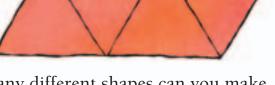
How many different pentominoes can you make?

Which ones fold up to make open cubes?

5. Which ones do not?

Activity Two

Here are four triangles joined side to side:



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

4.

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

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Making nets for three-dimensional solids