Lesson 78

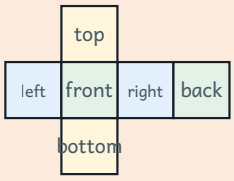
3D shapes – nets (a first look)

FOLDING A NET

1. Count the flat squares in the open shape.
2. Fold the edges together to form the solid.
3. Check that all faces match the solid.

WARM-UP

Look at this net, then answer the questions about it.



1. Count the squares (faces) in the net and write how many: ___
2. Colour two faces that will be OPPOSITE each other when the net folds up.
3. Fold it in your head. Write the name of the solid it makes: ___

PRACTICE

1. In the making corner, the builder draws a net using **6** squares in a cross to make a cube box.
   How many squares does the net of a cube need?
2. The builder tries a straight line of **6** squares for the cube but checks if it closes.
   Does a straight line of 6 squares fold into a cube?
3. The team opens a cereal box flat and counts the **6** faces joined edge to edge.
   Count the flat parts on this opened net before folding.
4. In building class, the group folds a cross of **6** squares and names the solid it makes.
   Which solid does a cross of 6 squares make?
5. The maker tests if **5** squares joined can fold into the cube with **6** faces.
   Can 5 squares make the net of a cube?

ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

a. A net of a cube always uses exactly 6 squares. ☐

b. A straight line of squares can sometimes fold into a cube. ☐

c. Any flat shape with 6 squares is always a net of a cube. ☐

d. Nets are sometimes made by opening a box flat. ☐

REFLECT Can you picture how a flat net folds up into a solid before you try it?

SHAPE & SPACE