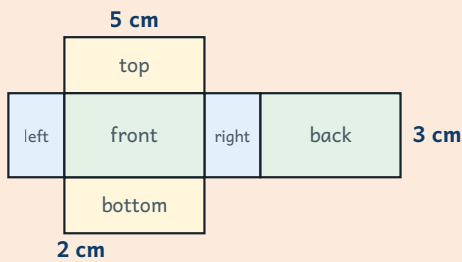


COUNTING THE CUBE

- 1 Count the flat faces on all sides of the cube: front back left right top bottom gives 6.
- 2 Count where two faces meet to find the edges: 12 in total.
- 3 Count the pointed corners for the vertices: 8 altogether.
- 4 Check the pattern with $6 + 8 - 12 = 2$.

WARM-UP

Examine the cube net and record the counts.



1. Mark all 6 faces on the net
2. Draw lines for the 12 edges
3. Label the 8 vertices with dots

PRACTICE

- 1 A builder makes a cube box using 6 faces and 12 edges.
How many vertices does the cube have?
- 2 The carpenter builds a cuboid with 6 faces and 8 vertices.
How many edges does the cuboid have?
- 3 When making a triangular prism model with 9 edges and 6 vertices.
- 4 The maker builds a square pyramid using 5 faces and 8 edges.
How many vertices does the square pyramid have?
- 5 A builder makes a triangular pyramid with 4 faces and 4 vertices.
How many edges does the triangular pyramid have?

? ALWAYS, SOMETIMES, NEVER

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

- a. A cube has 6 faces.
- b. A solid has 5 faces.
- c. Every solid has the same number of edges as faces.
- d. For a cube, a square pyramid and a triangular prism, faces + vertices - edges = 2.

