The Building Plan

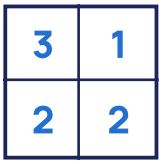
MathApex

Name: _____ Date: _____

Watch video

From the video Building plan 2, 1, 1 → **2 + 1 + 1 = 4 cubes**

1 Now it's your turn!



The plan shows 3, 1, 2 and 2. How many cubes does the building have?

Each number says how many cubes are stacked on that square.

☐ + ☐ + ☐ + ☐

= ☐ **cubes**

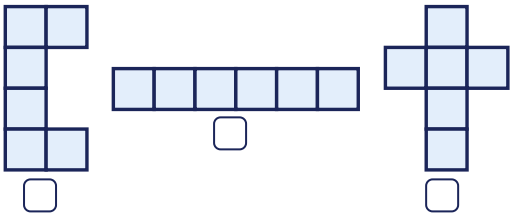
2 Corners, edges, faces.

Fill in the table. A cuboid looks like a cube, but with rectangles.

	Corners	Edges	Faces
Cube	☐	☐	☐
Cuboid	☐	☐	☐

3 Cube nets.

Which nets can be folded into a cube? Tick them.



4 Opposite.

Opposite faces add up to 7. Which number is on the bottom?



bottom: ☐ **bottom:** ☐ **bottom:** ☐

5 Reading a building plan.

How many cubes does the building have?

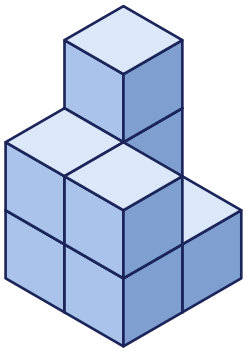


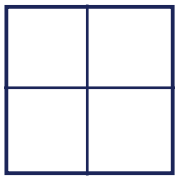
☐ + ☐ + ☐ + ☐ = ☐ **cubes**

★ Brain teaser

A cube building has three layers: 9 cubes at the bottom, 4 in the middle, 1 on top. How many cubes are there? And how many are missing to reach 30?

6 Write the building plan. How many cubes are on each square?



→ 

Front left is the bottom left square in the plan.

The Building Plan

Watch video

1 Now it's your turn!

3 + 1 + 2 + 2 = 8 cubes

2 Corners, edges, faces.

Cube: 8 corners, 12 edges, 6 faces

Cuboid: 8 corners, 12 edges, 6 faces

Both have the same numbers – only the faces of the cuboid are rectangles.

3 Cube nets.

Net 1: yes Net 2: no Net 3: yes

4 Opposite.

top 5 → bottom 2

top 6 → bottom 1

top 3 → bottom 4

5 Reading a building plan.

1 + 2 + 2 + 3 = 8 cubes

★ Brain teaser

9 + 4 + 1 = 14 cubes, 16 are missing.

6 Building plan.

3	1
2	2

8 cubes altogether

For parents and teachers: This worksheet goes with the video "The Building Plan" (Math Story 94, Grade 4). Cubes and cuboids: counting corners, edges and faces, checking nets, matching building plans and buildings. A real cube to hold helps.

More Math Stories with video and worksheet: **www.mathapex.app/en/math-stories/**