# Cube Buildings

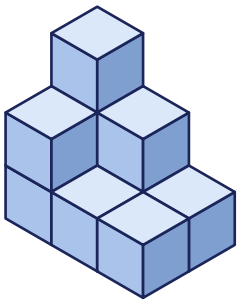
MathApex

Name: _____ Date: _____

Watch video

**From the video** 4 at the bottom, 1 on top → **4 + 1 = 5 cubes**

## 1 Now it's your turn!



6 at the bottom, 3 in the middle, 1 on top: how many cubes?

Count layer by layer: bottom, middle, top.

☐ + ☐ + ☐

= ☐ cubes

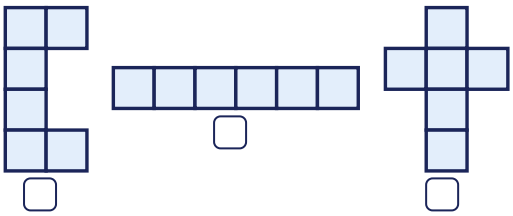
## 2 Corners, edges, faces.

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?

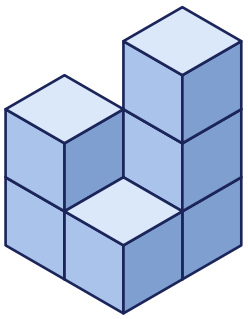
| | |
|---|---|
| 2 | 1 |
| 3 | 1 |

☐ + ☐ + ☐ + ☐ = ☐ cubes

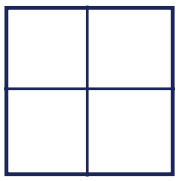
### ★ Brain teaser

A cube building has three layers: 6 cubes at the bottom, 3 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.

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MATH STORY 57 · ANSWERS

# Cube Buildings

Watch video

## 1 Now it's your turn!

**6 + 3 + 1 = 10 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 6 → bottom 1

top 4 → bottom 3

top 1 → bottom 6

## 5 Reading a building plan.

**2 + 1 + 3 + 1 = 7 cubes**

## ★ Brain teaser

**6 + 3 + 1 = 10 cubes, 20 are missing.**

## 6 Building plan.

| | |
|---|---|
| 1 | 3 |
| 2 | 1 |

7 cubes altogether

**For parents and teachers:** This worksheet goes with the video "Cube Buildings" (Math Story 57, 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/**