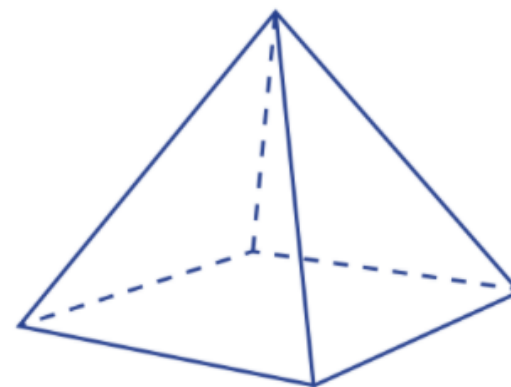


CURIOUS ANT

A curious ant looks up at a square-based pyramid. It decides to crawl along every edge of the pyramid, trying not to go over each edge more than once, if it can.

- a) What is the smallest number of edges that the ant must crawl along to do this?
- b) Each edge of this square-based pyramid is 5.5 centimetres long.

How far will the ant crawl in its exploration?



Extension

The total length of all the edges of a different square-based pyramid is 102 cm.

The edges of the base of this pyramid are all 10 cm long.

How long is each of its other edges?

Strategy hints!

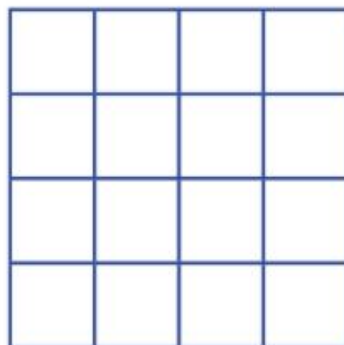
- ★ 1 Look for the important words in the question.
- ★ 5 Use a drawing.
- ★ 8 Make a model.

**Focus** Shape

- 2-D shapes

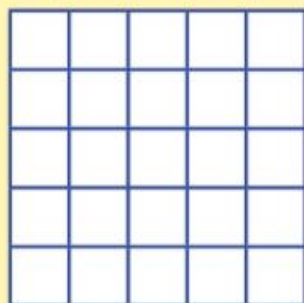
ALL THE SQUARES

How many squares can you see in the picture?



Extension

How many squares can you see in the picture?



Strategy hints!

- ★ 1 Look for the important words in the question.
- ★ 2 Look for a pattern.
- ★ 5 Use a drawing.

Focus Shape

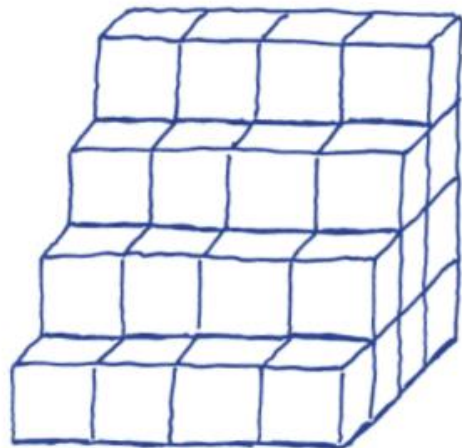
- 3-D objects



Measurement and Geometry 12

STAIRCASE SUM

- How many blocks were used to build this staircase?
- If the staircase is extended for another 6 levels, how many blocks will be used in its construction?



Extension

If the staircase in the picture is lifted so that all of its faces are visible, how many faces can be counted?

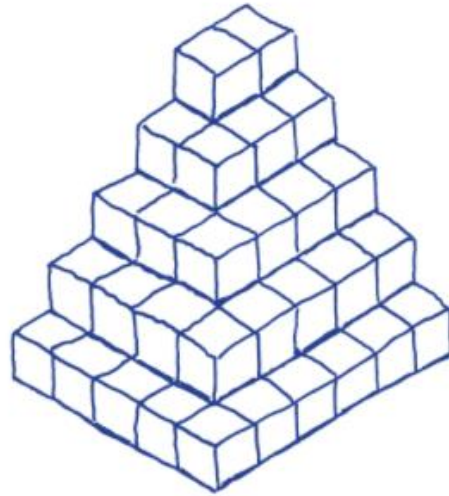
Strategy hints!

- ★ Look for the important words in the question.
- ★ Use a drawing.
- ★ Make a model.



CUBE TOWER

- a) How many cubes have been used to build this tower?
- b) If the tower is extended so that it has twice the number of levels, how many cubes will it contain?



Extension

- a) How many vertices does the tower in the picture have?
- b) How many vertices will a tower with twice the number of levels have?

Strategy hints!

- ★ Look for the important words in the question.
- ★ Look for a pattern.
- ★ Use a drawing.