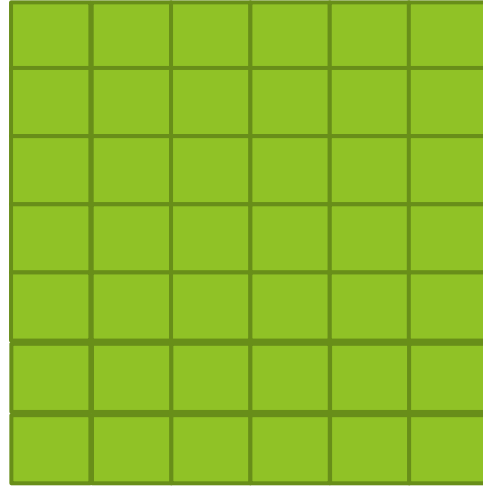


Year 4 Maths 13.1.21

Recall:

What is the surface area of this shape?

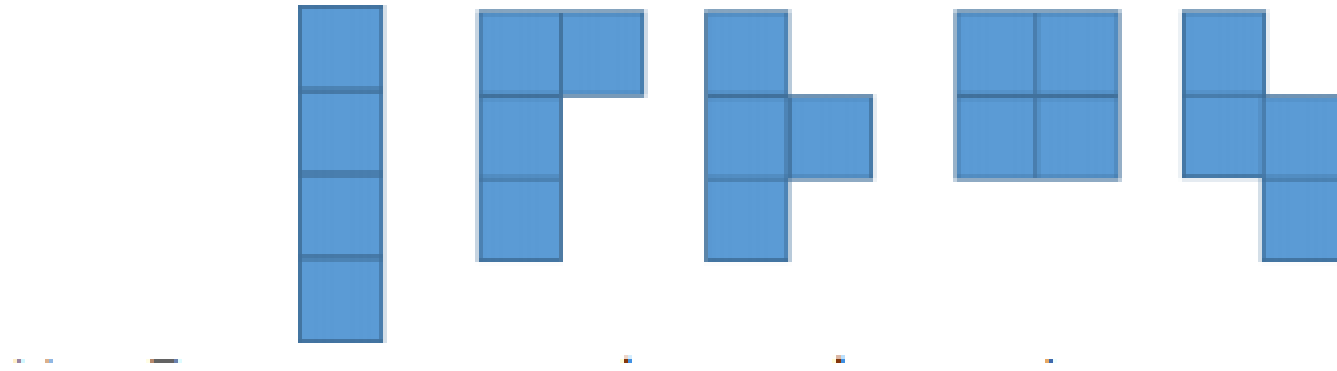
What multiplication number sentence could you write to show this?



Guided practice:

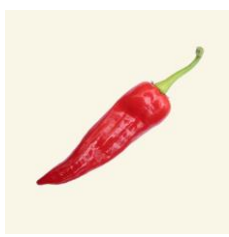
Ron has 4 squares.

He systematically makes rectilinear shapes.



If you turn Ron's shapes upside down, do they stay the same or are they different?

Intelligent practice:



How many different rectilinear shapes can you make with 8 squares? Will the area always be the same? Why?

Intelligent practice:



How many different rectilinear shapes can you make with 8 squares? Will the area always be the same? Why?

The area will always be the same because whilst the actual shape is changing, it is using the same number of squares which means it covers the same amount of surface.

Intelligent practice:



Draw a rectangle that has 7 squares in a row and 3 squares in a column. What would the surface area be of the rectangle?

Intelligent practice:



Draw a rectangle that has 7 squares in a row and 3 squares in a column. What would the surface area be of the rectangle?

$3 \times 7 = 21$ and so the surface area of our rectangle is 21

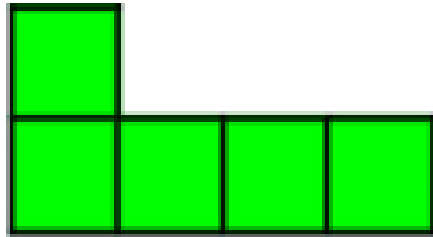
Intelligent practice:



Mo is building a patio made of 20 square slabs.
What could the patio look like?

Dive deeper 1:

Here is a rectilinear shape.

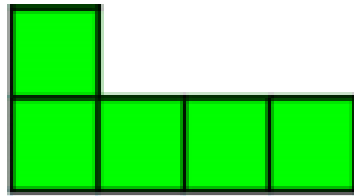


Using 7 more squares, can you make a rectangle?

Can you find more than one way?

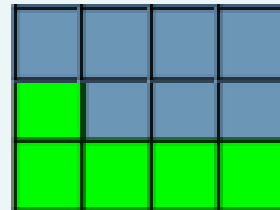
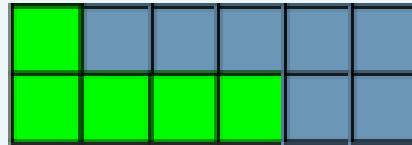
Dive deeper 1: Answer

Here is a rectilinear shape.



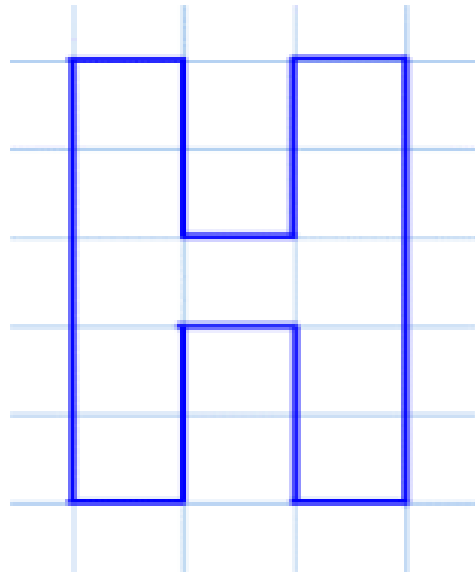
Using 7 more squares, can you make a rectangle?
Can you find more than one way?

Possible answers include:



Dive deeper 2:

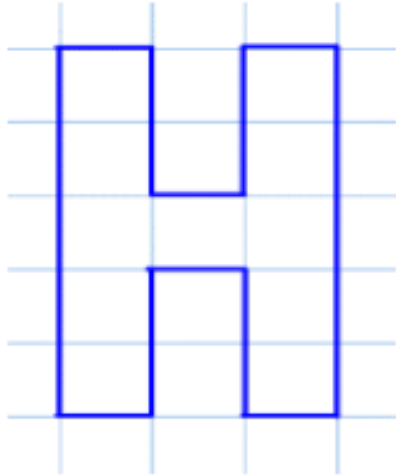
Can you make some capital letters on squared paper using less than 20 squares?



Make a word from some and count the total area of the letters.

Dive deeper 2: Answer

Can you make some capital letters on squared paper using less than 20 squares?



Make a word from some and count the total area of the letters.

Which letters have a line of symmetry?

What is the area of half of each letter?

Most letters can be made. They could be drawn on large squared paper or made with square tiles.