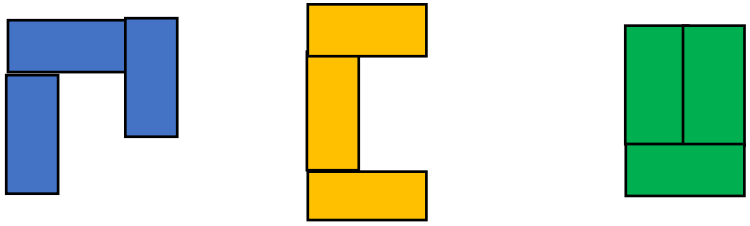
Day 1 – 25.01.21

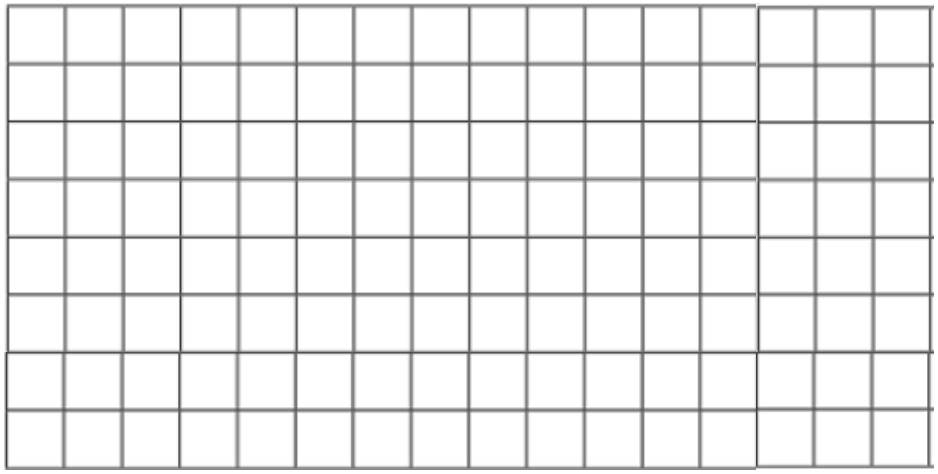
What is area?

1) a) Using 4 sticky notes, make as many different rectilinear shapes as you can.

A rectilinear shape is a shape that has straight sides and right angles. It can look like rectangles joined together. Here are some examples using 3 rectangles

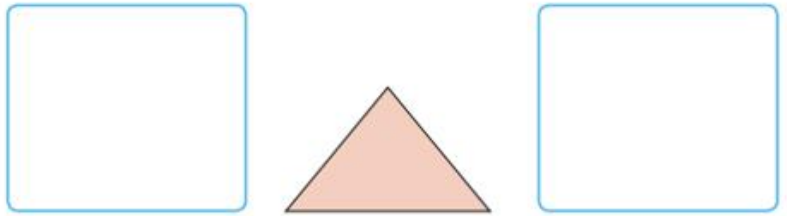


Now you have a go using 4 rectangles (All the same size). How many different shapes can you make? Draw them in the grid below by colouring the squares in the same pattern as the rectilinear shape you made.



b) All of the shapes that you have drawn in your grid have the same area. Explain how you know that this is correct.

2) Eva draws this shape.

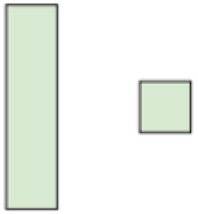


a) To the left, draw a triangle with a smaller area

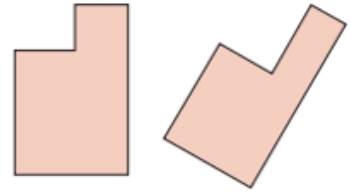
b) To the right, draw a triangle with a greater area.

3) For each pair of shapes, tick the shape with the greater area.

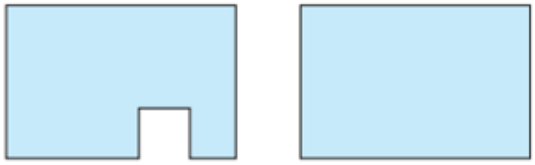
a)



c)



b)

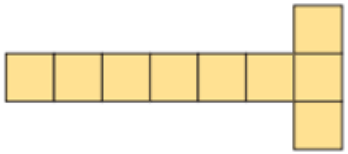


Day 2 – 26-01-21

Counting squares

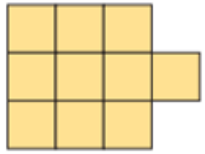
1 Count the squares in each shape to find the area.

A



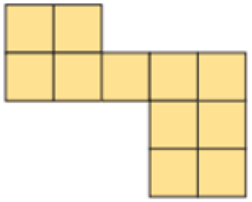
The area is ☐ squares.

B



The area is ☐ squares.

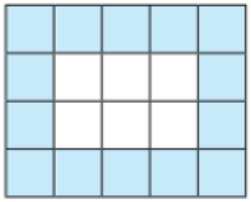
C



The area is ☐ squares.

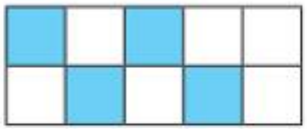
Which shape has the greatest area? _____

2 What is the area of the shaded part of the shape?



The area is ☐ squares.

3 Here is a kitchen tile.

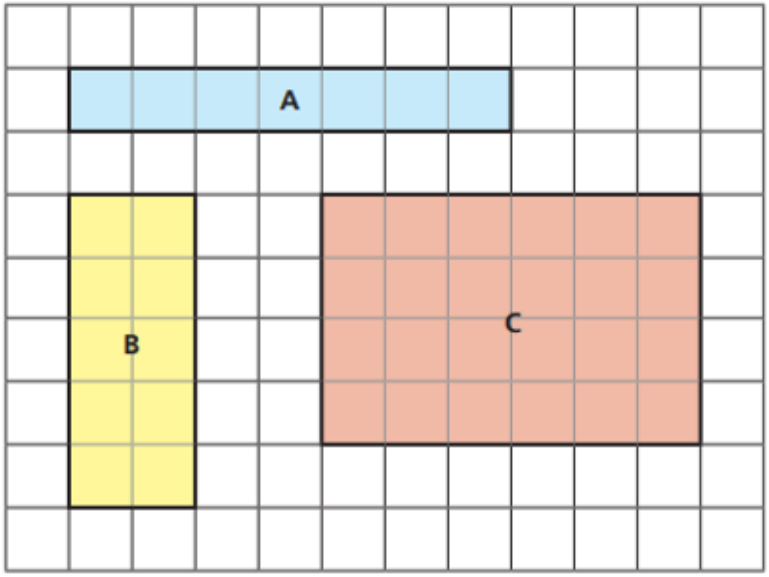


a) What area of the tile is blue? ☐ squares

b) What area of the tile is white? ☐ squares

c) What is the total area of the tile? ☐ squares

4 Find the area of each rectangle.



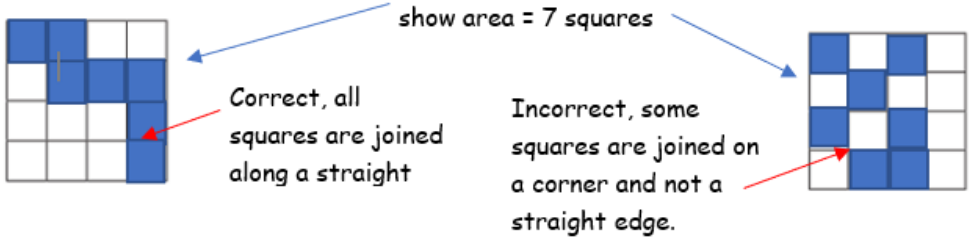
A = ☐ squares B = ☐ squares C = ☐ squares

Day 3 – 27-01-21

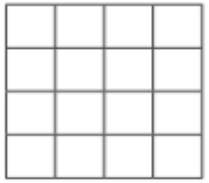
Making shapes

1 Draw a shape with the given area.

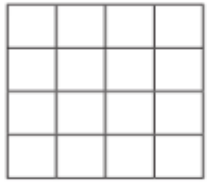
Remember to make your shapes rectilinear – a shape that has straight sides and right angles. Sides must be joined along a straight edge and not on a corner



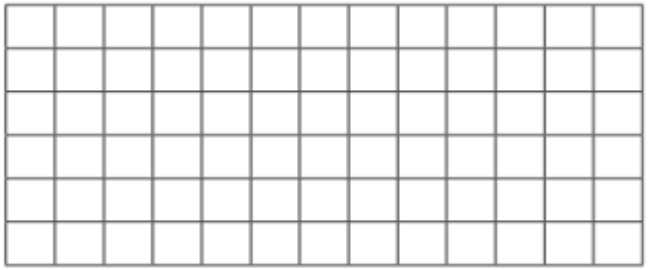
a) area = 7 squares



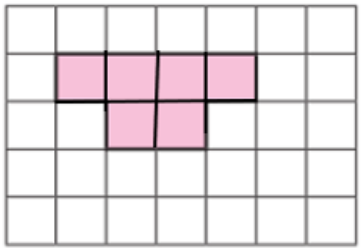
b) area = 13 squares



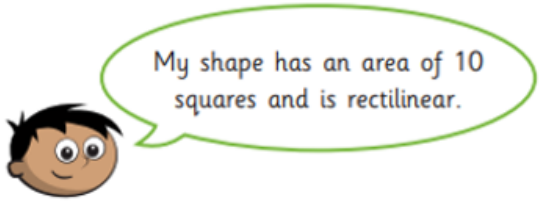
2 a) Draw two different shapes, each with an area of 8 squares.



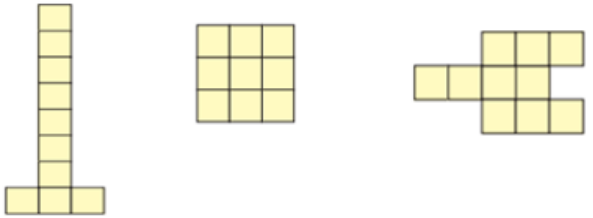
3 Shade more squares to make the area 11 squares.



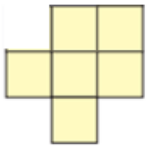
4 Amir has created a shape.



Tick the shapes that Amir could have made.



5 a) Add squares to this shape to make it into a square.



b) What is the area of the square you have made?

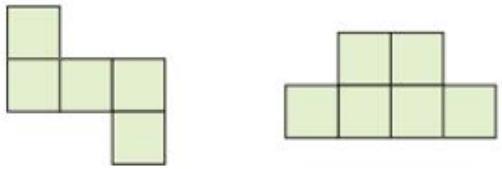
☐ squares

Day 4 – 28-01-21

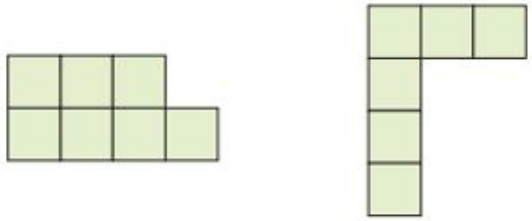
Comparing area

White Rose Maths

1 **a)** Tick the shape with the larger area.



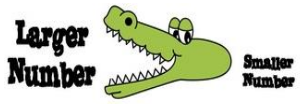
b) Tick the shape with the smaller area.



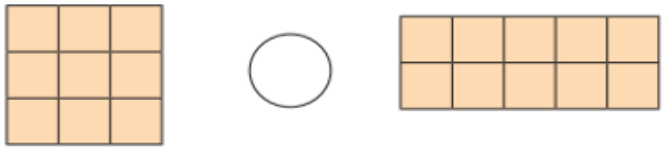
Remember to count the squares carefully to check

2 Write <, > or = to compare the area of the shape

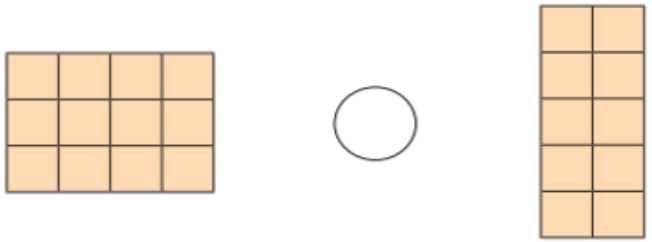
Remember the crocodile always eats the biggest number.



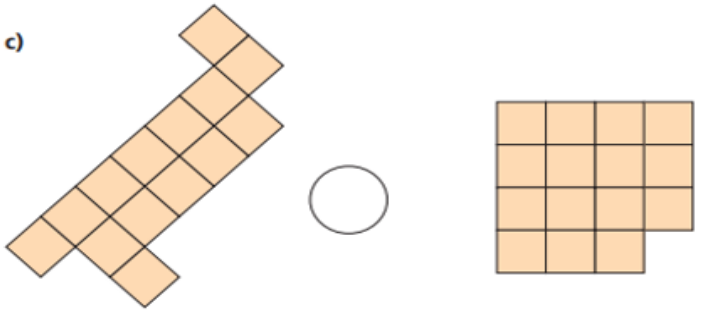
a)



b)

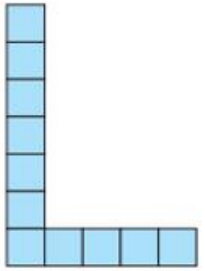


c)



3 Mo draws these two shapes.

A



B

Shape B must have a smaller area than shape A because it is shorter and thinner than shape A.

Do you agree with Mo? _____

Explain your reasoning.

Day 5 - 29-01-21 - Word Problems.

Challenge 1

Dexter has taken a bite of the chocolate bar.

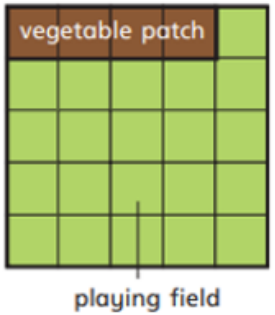
The chocolate bar was a rectangle.
Can you work out how many squares of chocolate there were to start with?

Challenge 2

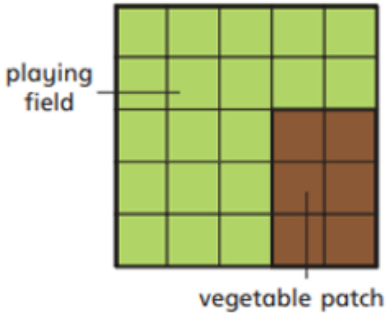
Here are plans of two school fields.

Each has a playing field and a vegetable patch.

High Street School



Main Street School

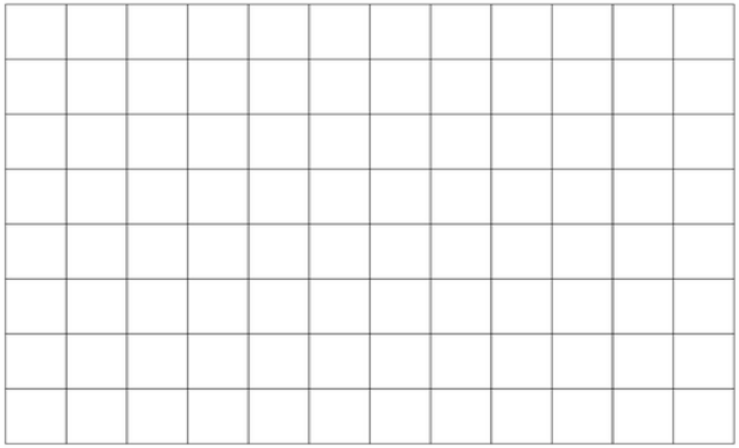


How many squares is the playing field at High Street school ☐

How many squares is the playing field at Main Street School ☐

The difference in area of the playing fields is ☐ squares

Challenge 3 - How many rectangles can you draw with an area of 12 squares? Use the squared paper below to help you.

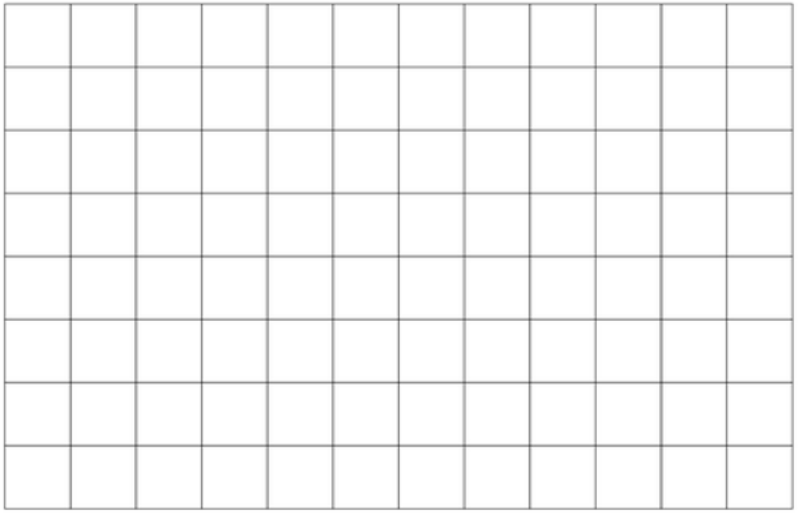


Challenge 4

Design a bedroom that has only **rectangular** furniture.
You need to include:

A bed made of 18 squares
A rug made of 15 squares
A desk made of 12 squares
A wardrobe made of 8 squares
And a toy box made of 6 squares.

Colour and label your items.



Week 4 Maths Assessment

Each week we will be giving you a little assessment task to complete when you have finished your work on Friday. This is so your teacher knows how you feel about the learning you have done. It is important that you complete the task independently and answer the questions honestly. Your teacher needs to know if you are still struggling so that they can make sure you have the right support in future lessons. Your teacher would also like to know if you are enjoying the work and if you are finding it helpful. Make sure you email your teacher this page along with your work for today.

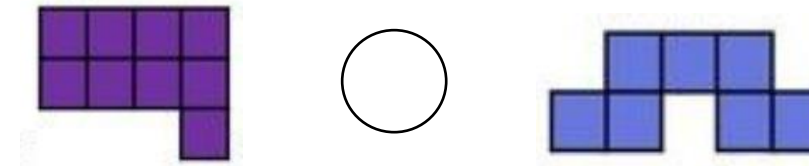
Question 1

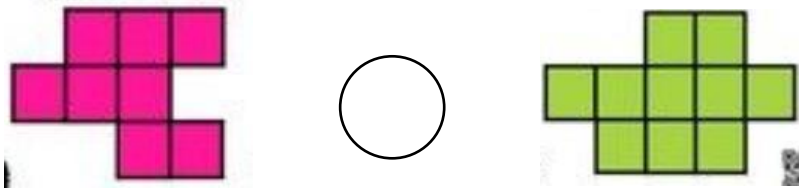
Tick the two shapes below which have the same area

Question 2

Write <, > or = to compare the area of the shape

Remember the crocodile always eats the biggest number.





Colour the box at the end of each statement to show how you feel about the learning.

Colour it red if you do not agree with the statement
Colour it yellow if you agree with the statement but are not confident
Colour it green if you agree with the statement

I know what area is	
I can find the area of a shape by counting the squares	
I can make rectilinear shapes using squares	
I can compare the area of shapes by counting the squares.	
I can solve word problems involving area	

The things I have enjoyed most about the Maths learning this week are:

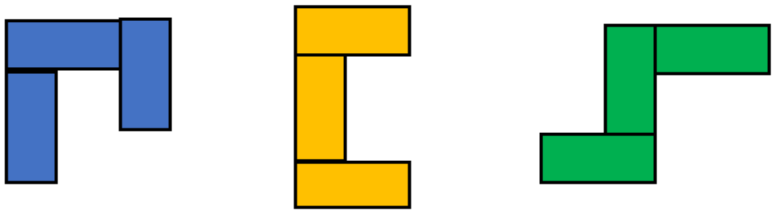
The things I struggled with this week are:

Day 1 – Answers

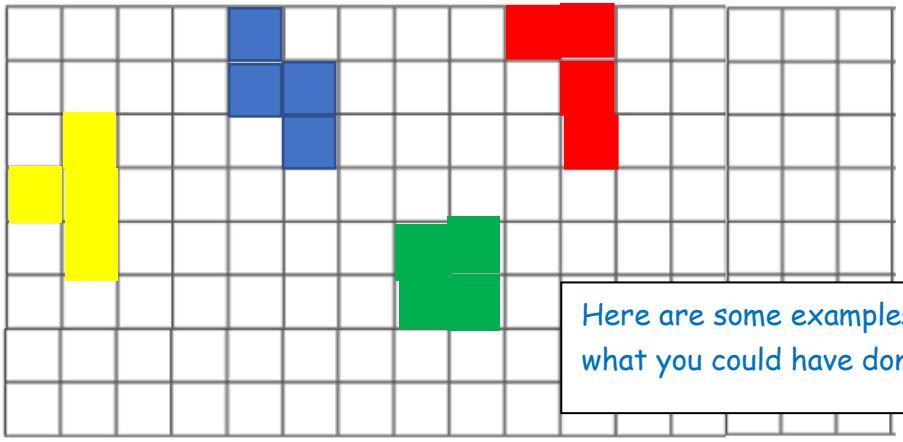
What is area?

1) a) Using 4 sticky notes, make as many different rectilinear shapes as you can.

A rectilinear shape is a shape that has straight sides and right angles. It can look like rectangles joined together. Here are some examples using 3 sticky notes



Now you have a go using 4 sticky notes. How many different shapes can you make? Draw them in the grid below by colouring the squares in the same pattern as your post it notes.

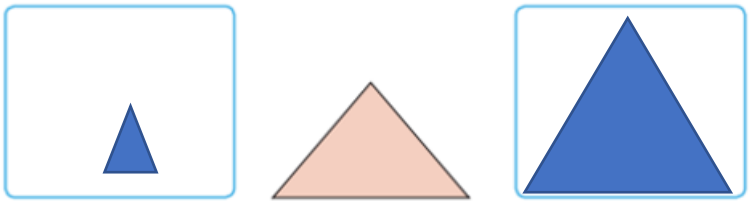


Here are some examples of what you could have done.

b) All of the shapes that you have drawn in your grid have the same area. Explain how you know that this is correct.

Because each post it note has the same area. They are just being put in a different order.

2) Eva draws this shape.

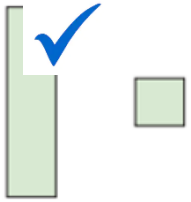


a) To the left, draw a triangle with a smaller area

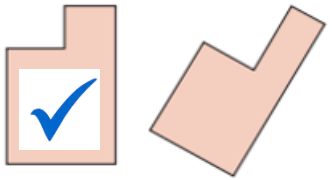
b) To the right, draw a triangle with a greater area.

3) For each pair of shapes, tick the shape with the greater area.

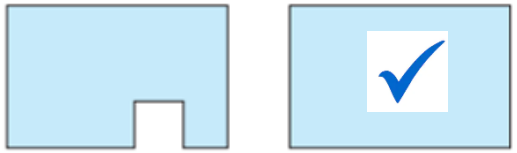
a)



c)



b)

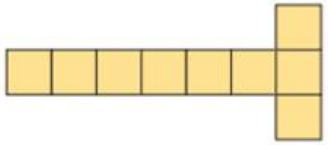


Day 2 - Answers

Counting squares

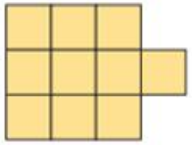
1 Count the squares in each shape to find the area.

A



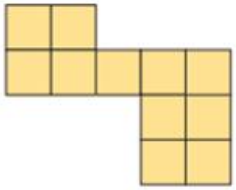
The area is 9 squares.

B



The area is 10 squares.

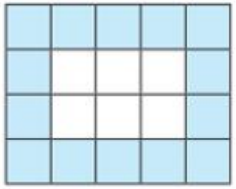
C



The area is 11 squares.

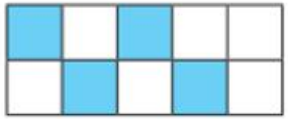
Which shape has the greatest area? Shape C

2 What is the area of the shaded part of the shape?



The area is 14 squares.

3 Here is a kitchen tile.

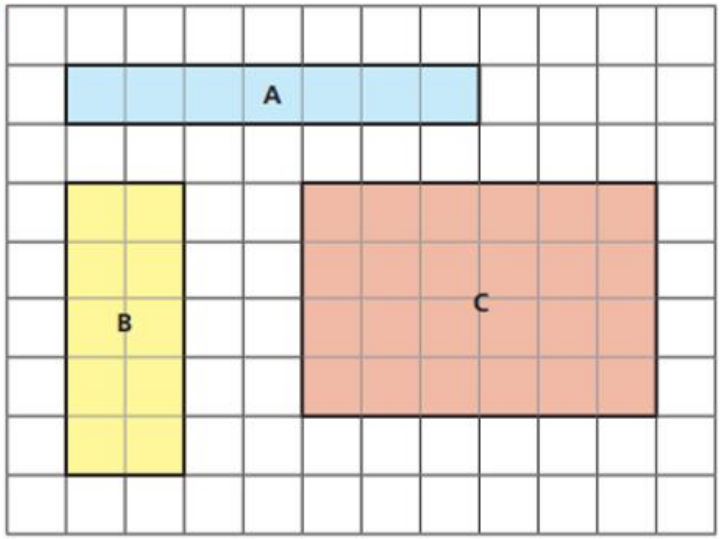


a) What area of the tile is blue? 4 squares

b) What area of the tile is white? 6 squares

c) What is the total area of the tile? 10 squares

4 Find the area of each rectangle.



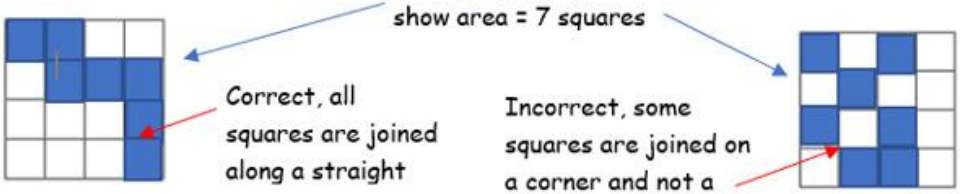
A = 7 squares B = 10 squares C = 24 squares

Day 3 – Answers

Making shapes

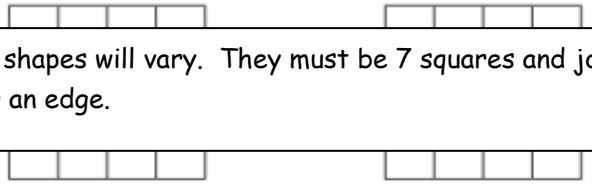
1 Draw a shape with the given area.

Remember to make your shapes rectilinear – a shape that has straight sides and right angles. Sides must be joined along a straight edge and not on a corner



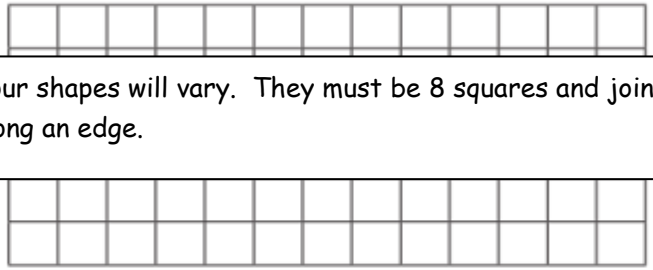
a) area = 7 squares

b) area = 13 squares



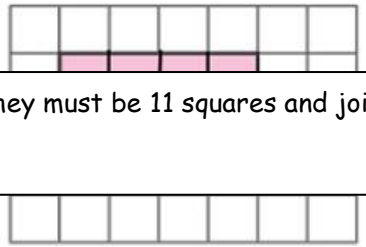
Your shapes will vary. They must be 7 squares and joined along an edge.

2 a) Draw two different shapes, each with an area of 8 squares.



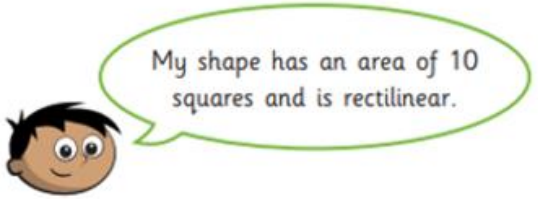
Your shapes will vary. They must be 8 squares and joined along an edge.

3 Shade more squares to mak

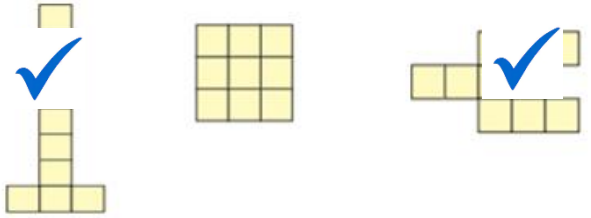


Your shapes will vary. They must be 11 squares and joined along an edge.

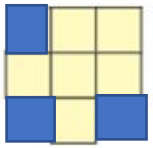
4 Amir has created a shape.



Tick the shapes that Amir could have made.



5 a) Add squares to this shape to make it into a square.



b) What is the area of the square you have made?

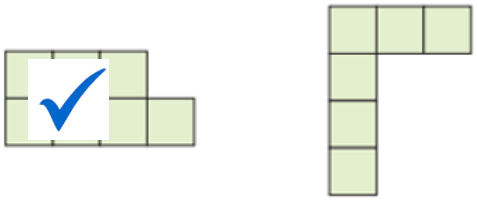
9 squares

Day 4 - Answers

Comparing area

1 a) Tick the shape with the larger area.

b) Tick the shape with the smaller area.

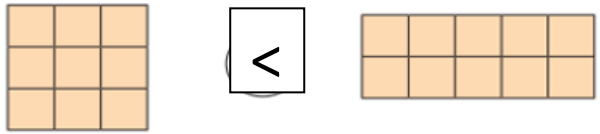


Remember to count the squares carefully to check

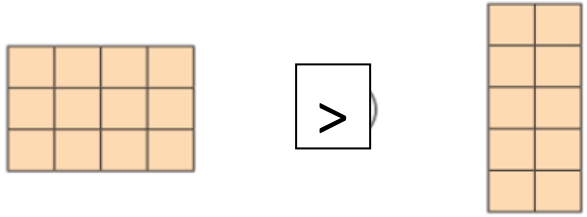
2 Write <, > or = to compare the area of the shape

Remember the crocodile always eats the biggest number.

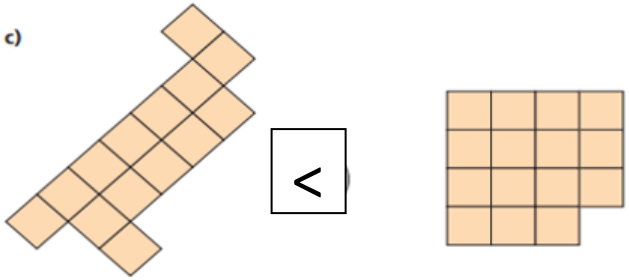
a)



b)

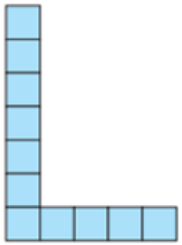


c)

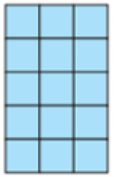


3 Mo draws these two shapes.

A



B



Shape B must have a smaller area than shape A because it is shorter and thinner than shape A.

Do you agree with Mo? _____

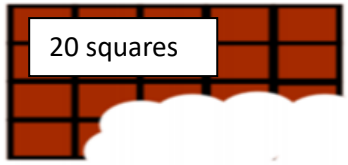
Explain your reasoning

Mo is not correct because shape A has less squares than shape B and it is the space the shape takes up that is important not necessarily the shape itself

Day 5 - Answers

Challenge 1

Dexter has taken a bite of the chocolate bar.



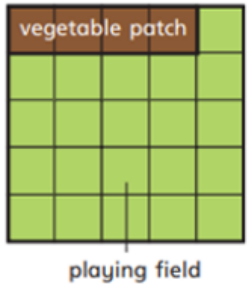
The chocolate bar was a rectangle.
Can you work out how many squares of chocolate there were to start with?

Challenge 2

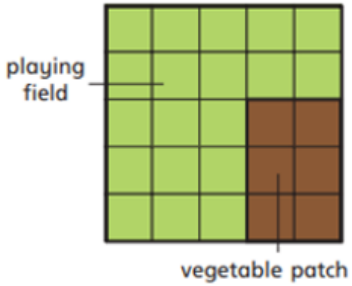
Here are plans of two school fields.

Each has a playing field and a vegetable patch.

High Street School



Main Street School

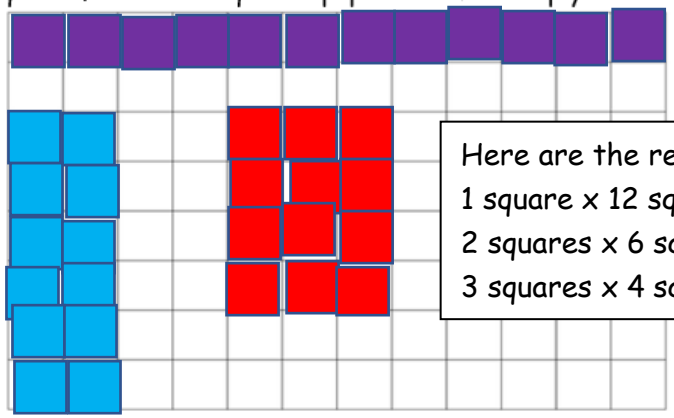


How many squares is the playing field at High Street school — 21 squares

How many squares is the playing field at Main Street School — 19 squares

The difference in area of the playing fields is — 2 squares

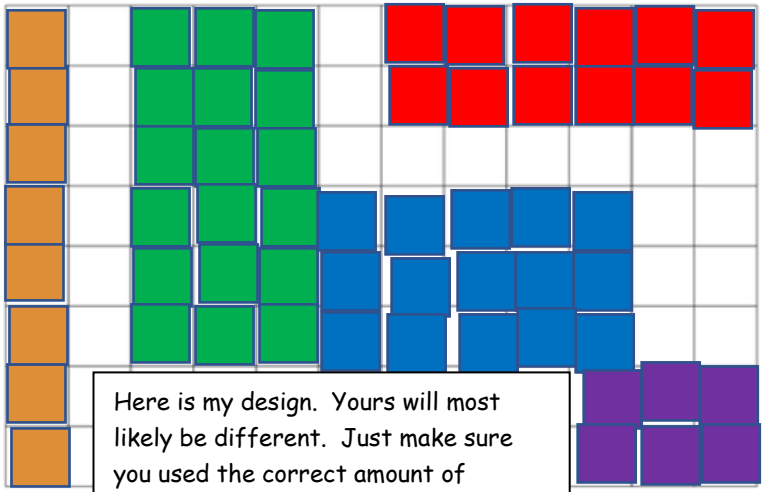
Challenge 3 - How many rectangles can you draw with an area of 12 squares? Use the squared paper below to help you.



Here are the rectangles you can make
1 square x 12 squares
2 squares x 6 squares
3 squares x 4 squares

Challenge 4

Design a bedroom that has only **rectangular** furniture.
You need to include:
A bed made of 18 squares
A rug made of 15 squares
A desk made of 12 squares
A wardrobe made of 8 squares
And a toy box made of 6 squares.
Colour and label your items.



Here is my design. Yours will most likely be different. Just make sure you used the correct amount of squares for each piece of furniture.