Miss Phillips and Mrs Bowers Maths Home Learning

After a problem- solving lesson on Monday, we are focussing for the rest of the week on area. You come across vocabulary for 2-D shapes, including rectilinear shapes. A rectilinear shape is a shape that has straight sides and right angles. It can look like two rectangles or more that have been joined together.

In lesson 1, which calls for sticky notes, you can use any pieces of paper you have to make rectilinear shapes, as long as they are the same size.

The worksheets for this week are in order after the video links. There is squared paper at the end of this document in case you need it to draw shapes using squares.

Monday – Correspondence problems

https://vimeo.com/498265698

Tuesday – What is area?

https://vimeo.com/499229510

Wednesday – Counting squares

https://vimeo.com/500381471

<u> Thursday – Making shapes</u>

https://vimeo.com/500864228

Friday – Comparing area

https://vimeo.com/501678823

Correspondence problems



A pizzeria offers a choice of bases and toppings.

Pizza base	Toppings	
deep pan	mushrooms	
thin	chicken	
	onion	
	peppers	
	sweetcorn	

Complete the multiplication to work out how many different combinations of pizza there are.



Complete the sentence.

There are

combinations of pizza.



Mo visits the funfair.

He buys a ticket that allows him to choose 1 ride and 1 game at the fair.



A canteen has 2 types of bread and a choice of 3 sandwich fillings.

Bread	Fillings
white	cheese
brown	tuna
	chicken

a) List the different sandwiches that can be made.

One has been done for you.

cheese on white

b) Complete the multiplication to represent the number of different combinations of bread and filling.



Complete the sentence.



combinations.

c) How many combinations would there be if there were 4 choices of sandwich filling?

	Explain your answer.	5	Here are the activity	choices available at S	umme
			Sport	Arts and crafts	Οι
			football	painting	v
			tennis	pottery	
	b) List all the different choices Mo can make.		golf	mosaics	
				origami	
			Each child is allowed 1 sport, 1 arts and cr a) How many activit	I to choose 3 activities rafts and 1 outward b cy combinations are th	s per o oound nere?
	Mo can make different choices.		b) Due to a flooded	pitch, football is canc	elled.
			How many combi	nations are now possi	ihlo7
4	Aisha has 3 headbands and 5 hair slides.		now many combi		
	Kim has 2 headbands and 6 hair slides. Who has more choices of combinations for wearing one headband and 1 slide?		There are	combinations.	
		6	Tom and Esther are b They have a choice o dress their snowman	ouilding a snowman. of 5 hats, 4 scarves an	ıd 2 p
	has more choices. Talk about it with a partner.		How many different	combinations are pos = mbinations.	sible?

er Camp.

nd crafts	Outward bound
nting	wall climbing
ttery	kayaking
osaics	abseiling
gami	

day:

l.

pairs of gloves to

?





What is area?

a) Work with a partner.

Use 4 sticky notes to make as many different rectilinear shapes as you can.

How many different shapes did you make?

b) All of the shapes that you made have the same area.

Explain how you know that this is correct.

Amir covers a rectangle with some counters.





a) Amir thinks the area of the rectangle is exactly 20 counters.

Is Amir correct? _____

b) Explain why counters are not the best way to measure area.



- a) To the left, draw a triangle with a smaller area
- **b)** To the right, draw a triangle with a greater area.

a)

White Rose Maths

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

b)













A longer object will always have a greater area than a shorter object.

Do you agree with Teddy? _____

Draw a picture to support your answer.



Eva is measuring the area of the tabletop.

She has covered the table with exactly 28 sheets of paper.



She covers one sheet of paper with sticky notes.



What is the area of the tabletop in sticky notes?



Kim thinks the area of the rectangle is 12 squares.



Is Kim correct? _____ How do you know?









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 These two shapes are made up of squares of the same size. These two shapes have the same area. $\bigcirc \bigcirc$ Jack The first shape is bigger as it takes up more space. Who is correct? _____ Explain how you know.

Here is a kitchen tile.







6

Here is a rectangle.



Find the area of each rectangle.

Α С B



Nijah and Eva are making shapes. They each use 6 squares. Nijah's shape Eva's shape The area of Nijah's shape is equal to the area of Eva's shape. Is this true or false? _____ How do you know? What is the area of each shape? squares area = squares area =













Making shapes

Draw a shape with the given area.

a) area = 7 squares

b) area = 13 squares

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

Shade more squares to make the area 11 squares.



Amir has created a shape.

White R©se Maths

Tick the shapes that Amir could have made.



Do you agree with Whitney? _____ Draw a picture to support your answer.







I cannot make a large square using an odd number of smaller squares.





Draw two different rectangles, each with an area of 12 squares.



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

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

squares

c) How could you make a larger square?

How many more squares do you need to add?

Show your working.

Dora Tommy Tommy says he has made a different shape with the same area. Do you agree with Tommy? _____ Explain your answer. Use six square sticky notes or square shapes. Make as many different rectilinear shapes with the squares as you can. Draw some of your shapes.

Compare answers with a partner.

Dora and Tommy have drawn rectilinear shapes.















Comparing area

a) Tick the shape with the larger area.





White R©se Maths

b) Tick the shape with the smaller area.







Write <, > or = to compare the area of the shapes.











В

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







Here is a shape.



a) What is the area of this shape?

squares

b) Draw a different shape with an area that is 2 squares larger.

Put these letter shapes in order of size.

Start with the shape with the smallest area.



Here are plans of two school fields.

Each has a playing field and a vegetable patch.

High Street School





The difference in area of the playing fields is

- The difference in area of the vegetable patches is squares.
- c) High Street School doubles the size of its vegetable patch. Which school now has the larger vegetable patch? Show your working.





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