Class 3 Home Learning, week beginning 8th June 2020

Maths - Year 4

Summer Term, Week 4 (w/c 11th May)

Lesson 4

Area - counting squares

Please watch the video before starting the questions.

I have not divided this work into challenges. Please work your way through the questions and do as many as you can. The answers are included in this document.

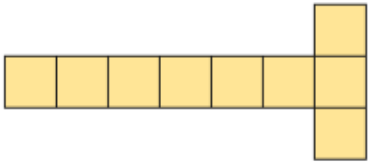
I have also included some reasoning and problem solving and a hands-on activity.

Can I measure and compare area? (Y4)

These pages do not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them neatly with a ruler.

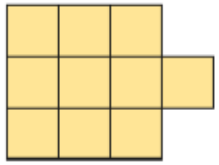
1 Count the squares in each shape to find the area.

A



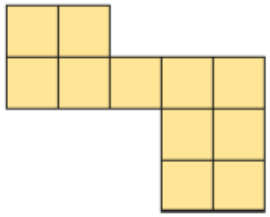
The area is ☐ squares.

B



The area is ☐ squares.

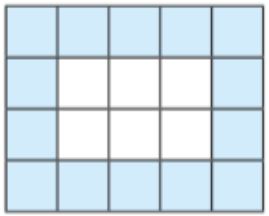
C



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.

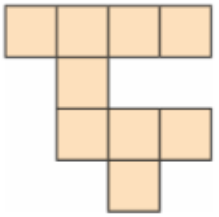
3 Here is a kitchen tile.

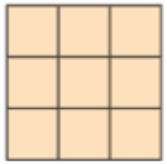
a) What area of the tile is blue? ☐ squares

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

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

4 These two shapes are made up of squares of the same size.





These two shapes have the same area.

Jack

The first shape is bigger as it takes up more space.

Rosie

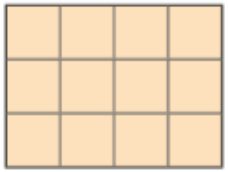
Who is correct? _____

Explain how you know.

_____

_____

5 Here is a rectangle.

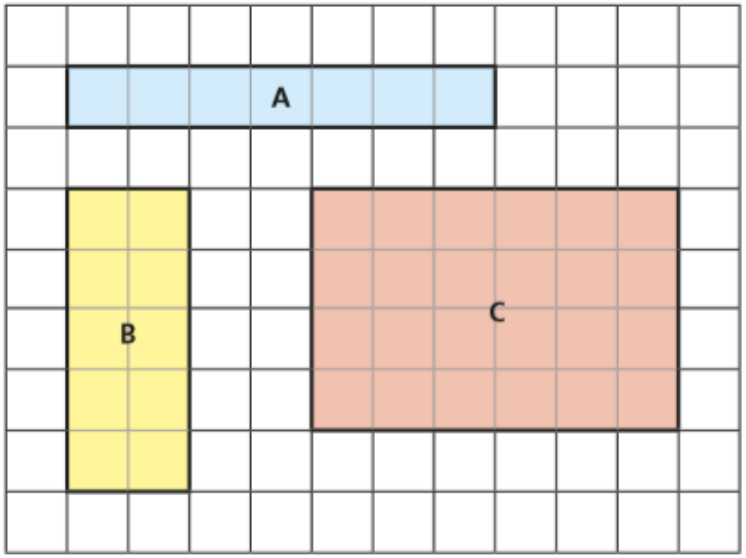


a) The rectangle has ☐ rows and ☐ columns.

b) What is the area of the rectangle? ☐ squares

c) How did you work out the area?

6 Find the area of each rectangle.

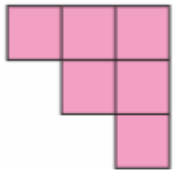


A = ☐ squares B = ☐ squares C = ☐ squares

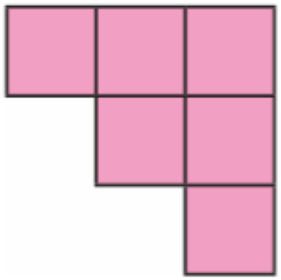
7 Nijah and Eva are making shapes.

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.

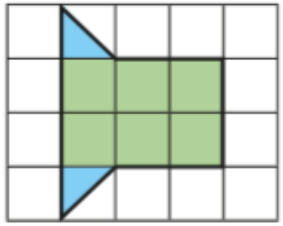
Is this true or false? _____

How do you know?

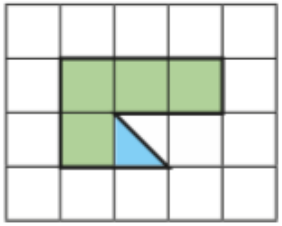
_____

_____

8 What is the area of each shape?



area = ☐ squares



area = ☐ squares

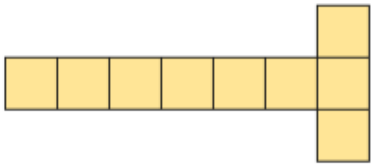
Answers are on the next page.

Can I measure and compare area? (Y4)

ANSWERS

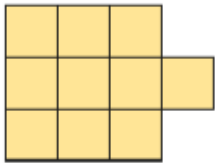
1 Count the squares in each shape to find the area.

A



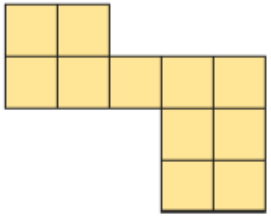
The area is [9] squares.

B



The area is [10] squares.

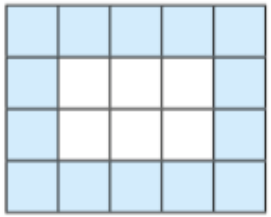
C



The area is [11] squares.

Which shape has the greatest area? C

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



The area is [14] squares.

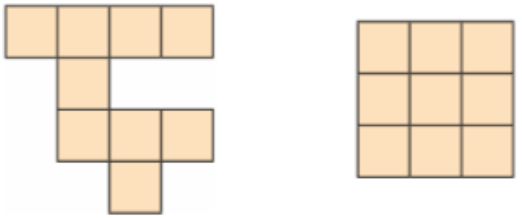
3 Here is a kitchen tile.

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 These two shapes are made up of squares of the same size.



Jack: These two shapes have the same area.

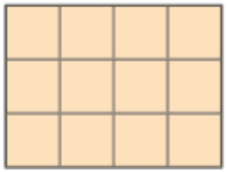
Rosie: The first shape is bigger as it takes up more space.

Who is correct? Jack

Explain how you know.

They both have an area of 9 squares.

5 Here is a rectangle.

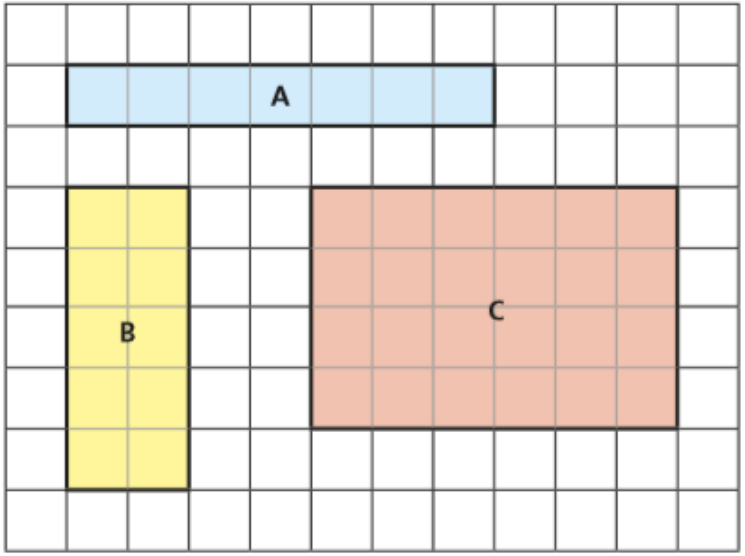


a) The rectangle has [3] rows and [4] columns.

b) What is the area of the rectangle? [12] squares

c) How did you work out the area?

6 Find the area of each rectangle.

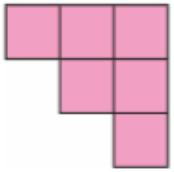


A = [7] squares B = [10] squares C = [24] squares

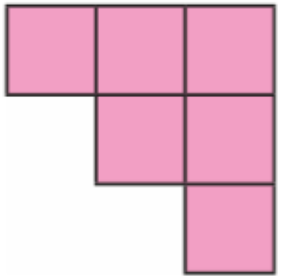
7 Nijah and Eva are making shapes.

They each use 6 squares.

Nijah's shape



Eva's shape



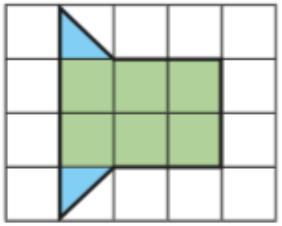
The area of Nijah's shape is equal to the area of Eva's shape.

Is this true or false? False

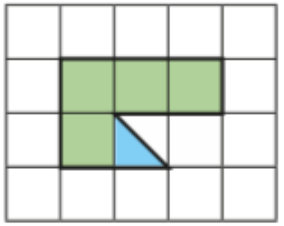
How do you know?

They are not made using the same size shapes

8 What is the area of each shape?



area = [7] squares



area = [4 ½] squares

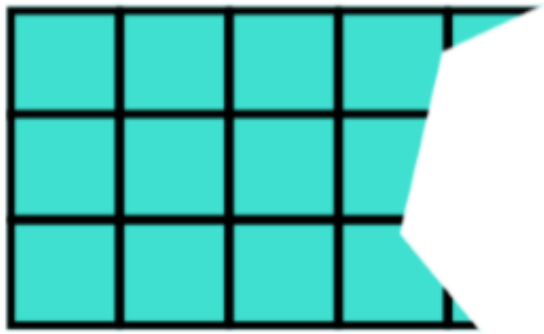
Can I measure and compare area? (Y4)

Reasoning and problem solving

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?

2) This rectangle has been ripped.



What is the smallest possible area of the original rectangle?

What is the largest possible area if the length of the rectangle is less than 10 squares?

Answers are on the next page.

Can I measure and compare area? (Y4)

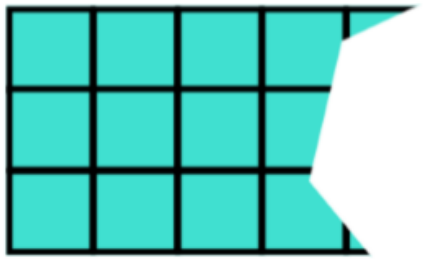
Reasoning and problem solving - ANSWERS

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?

There were 20 squares. You know this because two sides of the rectangle are shown.

This rectangle has been ripped.



What is the smallest possible area of the original rectangle?

What is the largest possible area if the length of the rectangle is less than 10 squares?

Smallest area – 15 squares.

Largest area – 30 squares.

Can I measure and compare area? (Y4)

This page does not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them neatly with a ruler.

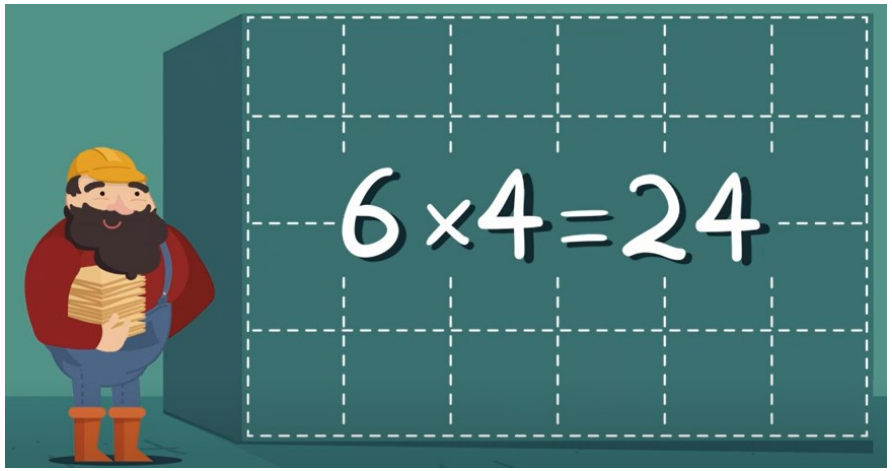
Your challenge

Measure the area of different things around your house and garden.

To measure the area of a square or rectangle, multiply its height by its width.

Here is a BBC Bitesize video to help you:

https://www.bbc.co.uk/bitesize/topics/zjbg87h/articles/zwqt6fr



Please remember to write what you are measuring and your calculations in your maths book.