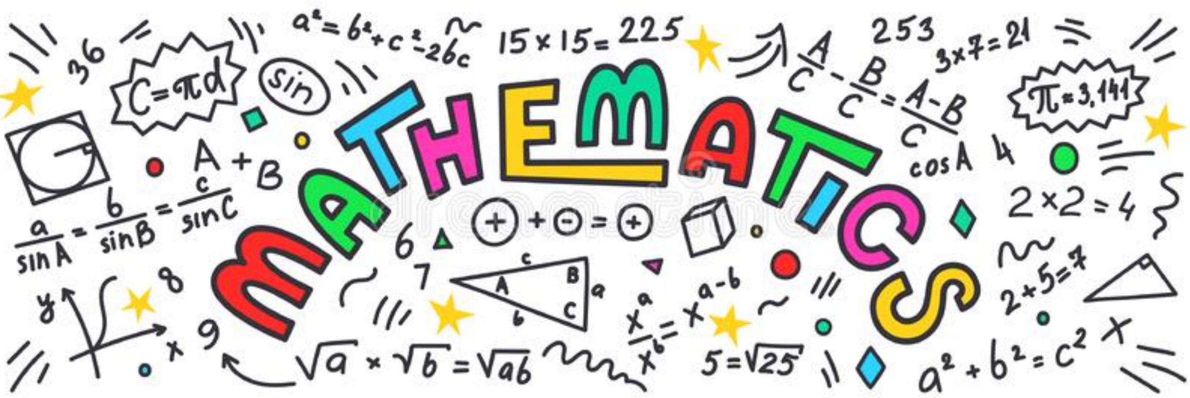
WEEK 6

Hello! Here are this week's maths activities. There is no need to print out the sheets - just write the answers in the yellow exercise book that went home in your distance learning pack.

If you have any questions, or when you have completed your work, email me at:

Beech@newvalleyprimary.com

You can send a photo of the answers in your distance learning book or add a document as an attachment.



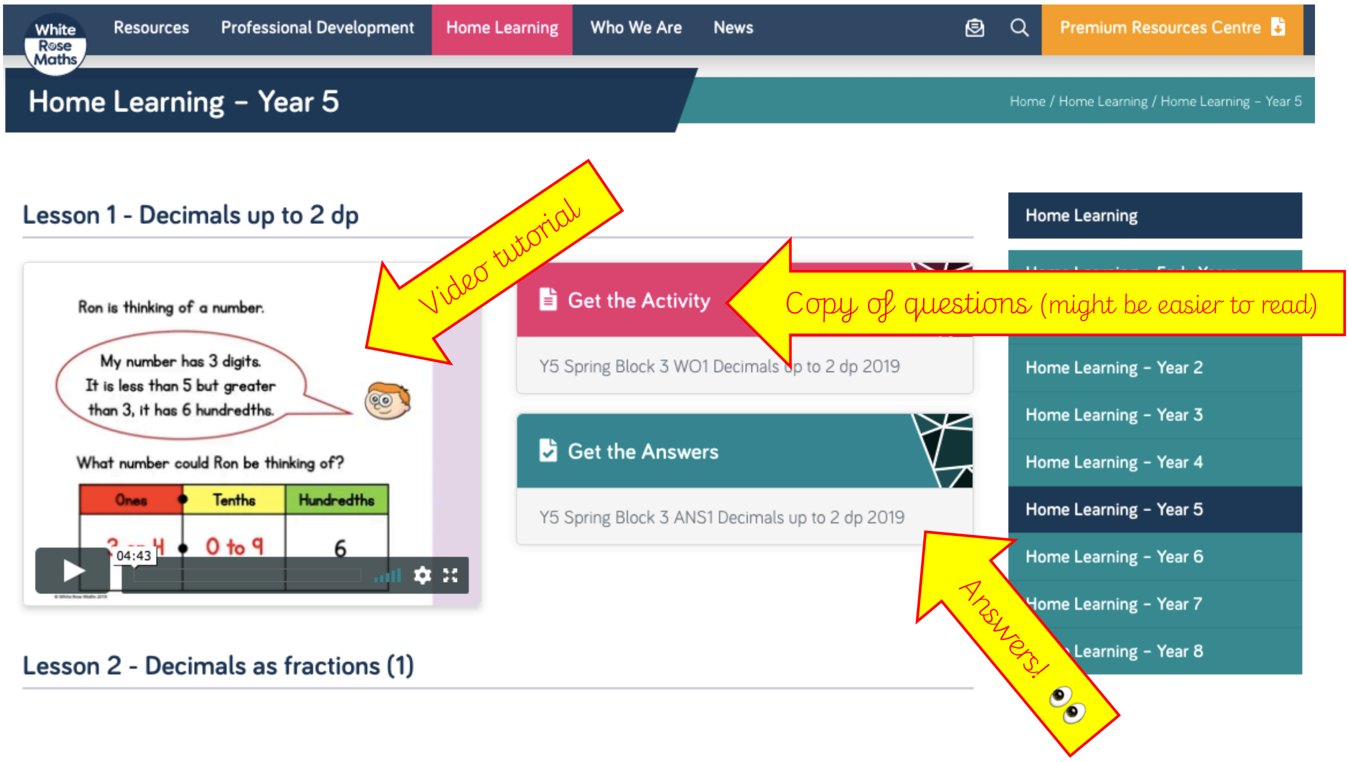
You don't have to do every single question from every day's lesson. Get as far through the lesson as you can and <u>try your best!</u>

We are going to be using the White Rose home learning resources. This resource, which we also use in school, includes video tutorials which I think will be very helpful.

If you are finding the lessons too hard (or easy) or need a bit more explanation, don't forget you can email me.

To access the video tutorials, follow this link:

https://whiterosemaths.com/homelearning/year-5/



Week 6
Maths Lesson 1

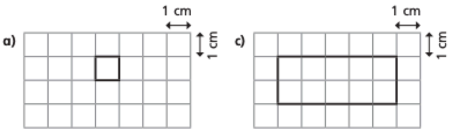
Don't forget to write this heading in your distance learning book.

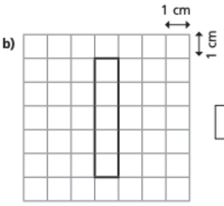
My learning journey:

Draw your learning journey in your book

Watch the Lesson 1 video:
Area of rectangles

1 On the grid, the area of each square is 1 cm²
Calculate the area of each rectangle.





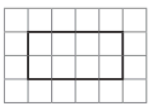
2 Complete the sentences to describe the rectangle.

There are ☐ rows.

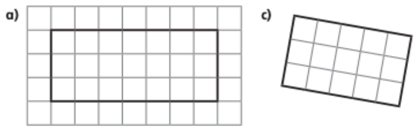
Each row has ☐ squares.

There are ☐ squares altogether.

☐ × ☐ = ☐

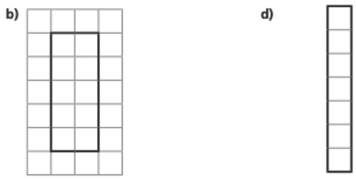


3 The area of each square is 1 cm²
Work out the area of each rectangle.



a) ☐ × ☐ = ☐ area = ☐

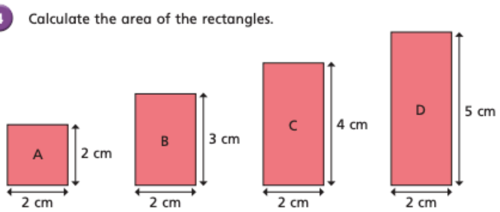
c) ☐ × ☐ = ☐ area = ☐



b) ☐ × ☐ = ☐ area = ☐

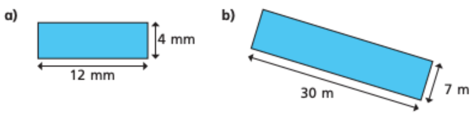
d) ☐ × ☐ = ☐ area = ☐

4 Calculate the area of the rectangles.



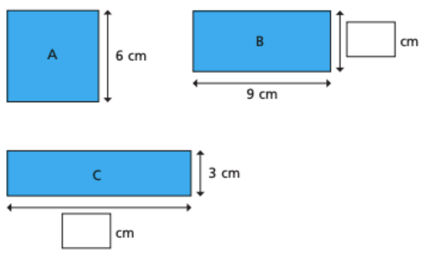
A = ☐ cm² B = ☐ cm² C = ☐ cm² D = ☐ cm²

5 Work out the area of these rectangles.



6 How many rectangles can you draw that have an area of 24 cm²?
Label the lengths. Your drawings do not have to be exact.

7 These shapes all have the same area. Shape A is a square.
Work out the missing lengths.



8 A rectangle has an area of 96 cm²
The length of the rectangle is 4 cm longer than the width.
Work out the length and width of the rectangle.

length = ☐ width = ☐

Week 6
Maths Lesson 2

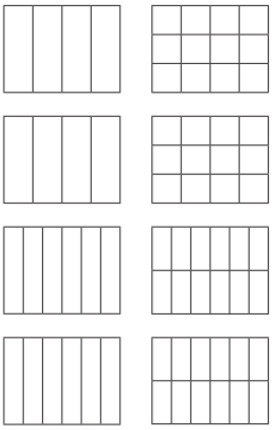
Don't forget to write this heading in your distance learning book.

My learning journey:

Draw your learning journey in your book

Watch the Lesson 2 video:
Equivalent fractions

1 Shade the shapes to show the equivalent fractions.



a) $\frac{1}{4} = \frac{\square}{12}$

b) $\frac{3}{4} = \frac{\square}{12}$

c) $\frac{1}{6} = \frac{\square}{\square}$

d) $\frac{5}{6} = \frac{\square}{\square}$

Just write how many should be shaded

2 Draw two rectangles to show that $\frac{1}{3} = \frac{4}{12}$

3 a) Sort the fractions into the groups.

Equivalent to $\frac{1}{4}$ | Equivalent to $\frac{1}{3}$

$\frac{5}{15}$ $\frac{2}{6}$ $\frac{3}{12}$ $\frac{6}{24}$ $\frac{8}{24}$ $\frac{5}{20}$ $\frac{4}{12}$ $\frac{2}{8}$

b) Write one more fraction in each group.

4 Complete the equivalent fractions.

a) $\frac{1}{7} = \frac{\square}{14}$ d) $\frac{3}{4} = \frac{6}{\square}$ g) $\frac{2}{\square} = \frac{10}{15}$

b) $\frac{5}{7} = \frac{\square}{14}$ e) $\frac{3}{4} = \frac{12}{\square}$ h) $\frac{2}{\square} = \frac{10}{25}$

c) $\frac{7}{8} = \frac{14}{\square}$ f) $\frac{3}{4} = \frac{\square}{12}$ i) $\frac{2}{7} = \frac{10}{\square}$

j) Describe the pattern in part g), h) and i) to a partner.

5 Find three ways to make the fractions equivalent.

a) $\frac{1}{\square} = \frac{7}{\square}$ b) $\frac{7}{\square} = \frac{14}{\square}$ c) $\frac{\square}{7} = \frac{\square}{14}$

$\frac{1}{\square} = \frac{7}{\square}$ $\frac{7}{\square} = \frac{14}{\square}$ $\frac{\square}{7} = \frac{\square}{14}$

$\frac{1}{\square} = \frac{7}{\square}$ $\frac{7}{\square} = \frac{14}{\square}$ $\frac{\square}{7} = \frac{\square}{14}$

6 Ron is finding equivalent fractions to $\frac{1}{4}$

$\frac{1}{4}$ is equivalent to $\frac{5}{8}$ and $\frac{9}{12}$

Do you agree with Ron? ______________

Draw a diagram to support your answer.

Compare answers with a partner.

7 Here are some equivalent fractions.

Find the values of A, B and C.

$\frac{A}{9}$ $\frac{3}{B}$ $\frac{2}{18}$ $\frac{C}{90}$

A = $\square$ B = $\square$ C = $\square$

8 Here are three fraction cards.

All the fractions are equivalent.

$\frac{3}{A}$ $\frac{B}{14}$ $\frac{12}{C}$

A + B = 13

Work out the value of C.

C = $\square$

9 $\frac{1}{5} = \frac{3}{1 + \bullet}$

Find the value of $\bullet$

$\bullet$ = $\square$

Week 6
Maths Lesson 3

Don't forget to write this heading in your distance learning book.

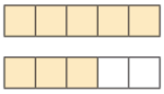
My learning journey:

Draw your learning journey in your book

Watch the Lesson 3 video:
Converting between improper and mixed fractions

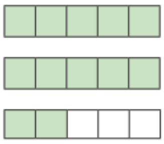
1 Convert the improper fractions to mixed numbers.

a)



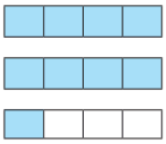
$\frac{8}{5}$ = ☐

b)



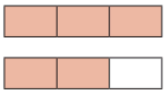
$\frac{☐}{5}$ = ☐

c)



$\frac{☐}{☐}$ = ☐

d)

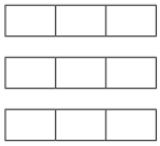


$\frac{☐}{☐}$ = ☐

2 Shade the bar models to represent each improper fraction.
Convert the improper fractions to mixed numbers.

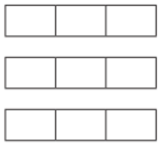
Just write how many should be shaded

a)



$\frac{7}{3}$ = ☐

b)



$\frac{8}{3}$ = ☐

c)

$\frac{9}{4}$ = ☐

d)

$\frac{11}{4}$ = ☐

3 Convert the mixed numbers to improper fractions.
Write the next conversion in each part.

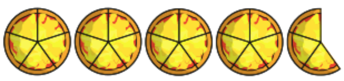
a)
$2\frac{1}{7}$ = ☐
$2\frac{2}{7}$ = ☐
$2\frac{3}{7}$ = ☐
☐ = ☐

b)
$3\frac{1}{5}$ = ☐
$4\frac{1}{5}$ = ☐
$5\frac{1}{5}$ = ☐
☐ = ☐

c)
$5\frac{1}{2}$ = ☐
$5\frac{1}{4}$ = ☐
$5\frac{1}{8}$ = ☐
☐ = ☐

Talk to a partner about any patterns you spot.

4 Here are 4 whole pizzas and $\frac{3}{5}$ of a pizza.



How many children can have $\frac{1}{5}$ of a pizza? ☐

5 Whitney is converting mixed numbers to improper fractions.

$4\frac{1}{7} = \frac{28}{7}$

Do you agree with Whitney? ______________
Explain your answer.

____

____

6

○$\frac{3}{5}$ = $\frac{△}{5}$

The table shows some possible values of the circle.
Use this to find the corresponding value of the triangle.

○	△
1	
2	
4	
8	
16	
	88
	803

Week 6
Maths Lesson 4

Don't forget to write this heading in your distance learning book.

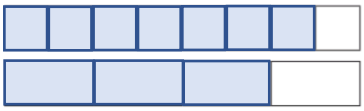
My learning journey:

Draw your learning journey in your book

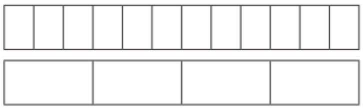
Watch the Lesson 4 video:
Compare and order fractions less than one

1 Write <, > or = to compare the fractions.

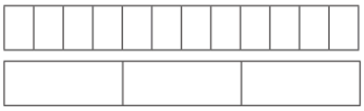
Use the bar models to help you.



$\frac{7}{8} \bigcirc \frac{3}{4}$



$\frac{9}{12} \bigcirc \frac{3}{4}$



$\frac{7}{12} \bigcirc \frac{2}{3}$

2 Write <, > or = to compare the fractions.

a) $\frac{1}{5} \bigcirc \frac{4}{15}$

b) $\frac{2}{5} \bigcirc \frac{4}{15}$

c) $\frac{2}{5} \bigcirc \frac{6}{15}$

d) $\frac{2}{3} \bigcirc \frac{6}{15}$

e) $\frac{2}{3} \bigcirc \frac{6}{12}$

f) $\frac{2}{3} \bigcirc \frac{6}{9}$

g) $\frac{2}{9} \bigcirc \frac{1}{3}$

h) $\frac{4}{9} \bigcirc \frac{1}{3}$

i) $\frac{4}{12} \bigcirc \frac{1}{3}$

j) $\frac{8}{12} \bigcirc \frac{2}{3}$

k) $\frac{8}{12} \bigcirc \frac{3}{3}$

l) $\frac{8}{12} \bigcirc \frac{3}{4}$

3 Sort the fractions into the circles.

greater than $\frac{1}{3}$ | equal to $\frac{1}{3}$ | less than $\frac{1}{3}$

$\frac{2}{3}$ $\frac{1}{6}$ $\frac{1}{2}$ $\frac{2}{6}$ $\frac{2}{9}$ $\frac{5}{12}$ $\frac{4}{12}$ $\frac{4}{15}$ $\frac{5}{15}$

4 What could the missing numerators and denominators be?

Write a number in each box to make the statements correct.

a) $\frac{\square}{5} < \frac{5}{15}$

b) $\frac{\square}{6} < \frac{5}{12}$

c) $\frac{\square}{12} < \frac{5}{6}$

d) $\frac{\square}{3} < \frac{5}{6}$

e) $\frac{3}{5} < \frac{5}{\square}$

f) $\frac{5}{6} < \frac{5}{\square}$

g) $\frac{6}{9} < \frac{5}{\square}$

h) $\frac{10}{12} < \frac{5}{\square}$

i) $\frac{23}{24} < \frac{5}{\square}$

Compare answers with a partner.

5 Tommy and Eva are comparing fractions.

$\frac{2}{3}$ $\frac{8}{12}$ $\frac{4}{9}$

Tommy: I found a common denominator of 36 to compare the fractions.

Eva: I found a common numerator of 4 to compare the fractions.

Whose method is more efficient? ______________

6 Write the fractions in ascending order.

a) $\frac{2}{5}, \frac{2}{7}, \frac{2}{3}, \frac{2}{4}, \frac{2}{10}$

b) $\frac{2}{3}, \frac{5}{9}, \frac{1}{9}, \frac{5}{6}, \frac{2}{9}$

c) $\frac{3}{5}, \frac{7}{10}, \frac{1}{2}, \frac{3}{10}, \frac{1}{5}$

d) $\frac{3}{8}, \frac{6}{17}, \frac{12}{30}, \frac{2}{7}, \frac{1}{3}$

7 What could the missing numerator be?

$\frac{3}{5} < \frac{\square}{15} < \frac{9}{10}$

Write all four possibilities.

$\frac{\square}{15}$ $\frac{\square}{15}$ $\frac{\square}{15}$ $\frac{\square}{15}$

Week 6
Problem Solving

Don't forget to write this heading in your distance learning book.

Want to grow your brain some more? Have a go at these...

1 Here is how much it costs to go to the zoo.

Mr Jones and his 3 children go to the zoo.

How much does it cost them altogether?

2 If

▲ + ▲ = 12

♥ + ▲ = 19

What is the value of ♥ ?

3 What are the missing numbers?

$\square \times 10 = 40$

$\square \div 10 = 7$

White Rose Maths

Fancy something a little harder? Try these...

1 The table shows the ages of people in a theme park.

Age	Number of people
Under 18	126
18 - 60	195
Over 60	38

These are the entry costs.

How much money did the theme park make from entry costs?

2 Given that

▲ + ▲ + ☆ + ☆ = 100

♥ + ♥ + ▲ + ☆ = 78

Work out the value of the ♥

3 What are the missing numbers?

$\square \times 10 = 42$

$\square \div 10 = 42$

White Rose Maths