

# Maths Home Learning (not using White Rose resources)

## Week 8

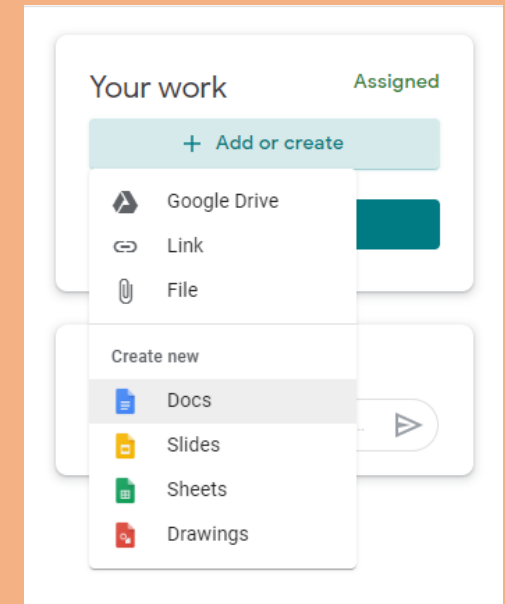
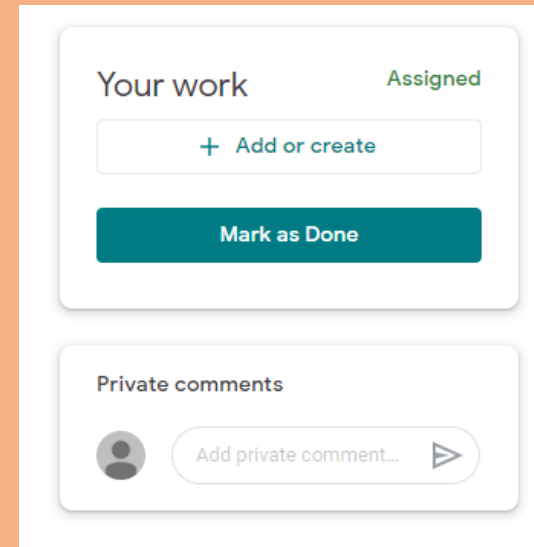
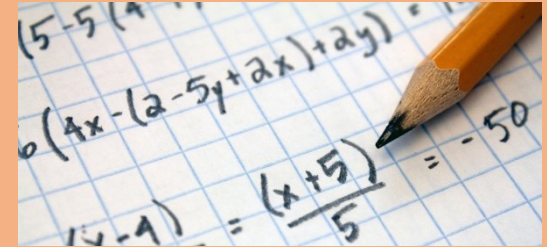
There will be 5 Maths lessons teaching the same concepts as the White Rose lessons but at a less tricky level.

# Maths Home Learning Tip!

If the links don't work when you click on them in the PowerPoint, copy and paste the link into your browser.

# Ways to complete the activities

1. You can leave the activity sheet on a screen, write your answers on a piece of paper, take a photo and upload it under the Maths assignment.
2. You can create a **Google Doc**, type your answers into it and submit the **Google Doc** under the Maths assignment.



# Week 8 Overview

Monday -	Adding Fractions
Tuesday -	Subtracting Fractions
Wednesday -	Finding Fractions of amounts
Thursday -	Calculate Quantities
Friday -	Friday Challenges

# Monday - Adding fractions

Copy the fractions out  
onto a piece of paper  
and then add them  
together?

Add these fraction together?  
Remember the denominator  
stays the same!

$$\frac{1}{4} + \frac{1}{4}$$

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

$$\frac{3}{4} + \frac{3}{4}$$

$$\frac{\square}{4} + \frac{\square}{4} = \frac{7}{4}$$

What other fractions can you make and add?

$$\frac{2}{5} + \frac{1}{5}$$

$$\frac{3}{7} + \frac{6}{7}$$

$$\frac{7}{9} + \frac{4}{9}$$

# Monday - Adding fractions - Answers

Add these fraction together?  
Remember the denominator  
stays the same!

$$\frac{1}{4} + \frac{1}{4} = \frac{2}{4} \quad \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4} \quad \frac{3}{4} + \frac{3}{4} = \frac{6}{4} \quad \frac{3}{4} + \frac{4}{4} = \frac{7}{4}$$

What other fractions can you make and add?

$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5} \quad \frac{3}{7} + \frac{6}{7} = \frac{9}{7} \quad \frac{7}{9} + \frac{4}{9} = \frac{11}{9}$$

# Monday Challenge

Alex is adding fractions.

$$\frac{3}{9} + \frac{2}{9} = \frac{5}{18}$$



Is she correct? Explain why.

Look, how Alex has add the fractions together? Can you spot her mistake?

# Monday Challenge - Answer

Alex is adding fractions.

$$\frac{3}{9} + \frac{2}{9} = \frac{5}{18}$$



Is she correct? Explain why.

Alex is incorrect.  
Alex has added  
the denominators  
as well as the  
numerators.

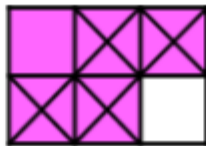
# Tuesday -subtracting fractions

When subtracting fractions you can use bar models to help you!  
Remember the denominator always stays the same.

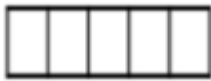
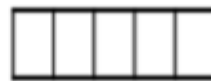
Use the bar models to subtract the fractions.



$$\frac{6}{7} - \frac{2}{7} =$$



$$\frac{11}{6} - \frac{\square}{6} = \frac{\square}{6}$$



$$\frac{13}{5} - \frac{\square}{5} = \frac{6}{5}$$

Subtract these  
fractions - You can  
draw bar model to  
help you!

$$\frac{8}{8} - \frac{3}{8} =$$

$$\frac{7}{8} - \frac{3}{8} =$$

$$\frac{16}{8} - \frac{9}{8} =$$

$$\frac{13}{8} - \frac{\square}{8} = \frac{7}{8}$$

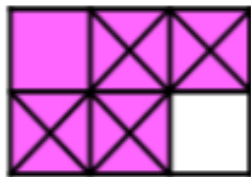
# Tuesday -subtracting fractions - Answers

When subtracting fractions you can use bar models to help you!  
Remember the denominator always stays the same.

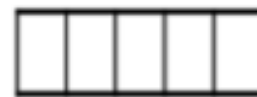
Use the bar models to subtract the fractions.



$$\frac{6}{7} - \frac{2}{7} = \frac{4}{7}$$



$$\frac{11}{6} - \frac{4}{6} = \frac{7}{6}$$



$$\frac{13}{5} - \frac{7}{5} = \frac{6}{5}$$

$$\frac{8}{8} - \frac{3}{8} = \frac{5}{8}$$

$$\frac{7}{8} - \frac{3}{8} = \frac{4}{8}$$

$$\frac{16}{8} - \frac{9}{8} = \frac{7}{8}$$

$$\frac{13}{8} - \frac{6}{8} = \frac{7}{8}$$

# Tuesday Challenge

Annie and Amir are working out the answer to this problem.

$$\frac{7}{9} - \frac{3}{9}$$

Annie uses this model.



Amir uses this model.



Which model is correct? Explain why.

# Tuesday Challenge - Answer

Annie and Amir are working out the answer to this problem.

$$\frac{7}{9} - \frac{3}{9}$$

Annie uses this model.



Amir uses this model.



Which model is correct? Explain why.







They are both correct. The first model shows finding the difference and the second model shows take away.

Ensure the number stories match the model of subtraction. For Annie's this will be finding the difference. For Amir this will be take away.

# Wednesday - Fractions of amount.



When we want to find a fraction of an amount you need to look at the denominator that tells you how many groups you need to divide the number into.







 $\frac{1}{2}$ of 6 = 3	 $\frac{1}{3}$ of 6 =	 $\frac{1}{4}$ of 12 =
 $\frac{1}{4}$ of 12 =	 $\frac{1}{5}$ of 10 =	 $\frac{1}{3}$ of 18 =

Have a go  
at finding  
the  
fraction  
of these  
amounts?

# Wednesday - Fractions of amount.



When we want to find a fraction of an amount you need to look at the denominator that tells you how many groups you need to divide the number into.

 $\frac{1}{2}$ of 6 = 3	 $\frac{1}{3}$ of 6 = 2	 $\frac{1}{4}$ of 12 = 4
 $\frac{1}{4}$ of 12 = 3	 $\frac{1}{5}$ of 10 = 2	 $\frac{1}{3}$ of 18 = 6

Have a go and see if you can work these ones out?  
You can use counters or any other objects to help you

Mo has 12 apples.

Use counters to represent his apples and find:

$\frac{1}{2}$  of 12

$\frac{1}{4}$  of 12

$\frac{1}{3}$  of 12

$\frac{1}{6}$  of 12

# Answers

Mo has 12 apples.

Use counters to represent his apples and find:

$$\frac{1}{2} \text{ of } 12$$

6

$$\frac{1}{4} \text{ of } 12$$

3

$$\frac{1}{3} \text{ of } 12$$

4

$$\frac{1}{6} \text{ of } 12$$

2

# Wednesday Challenge

$\frac{1}{2}$  of 22 = 12  
True or False

# Wednesday Challenge - Answers

$$\frac{1}{2} \text{ of } 22 = 12$$

False

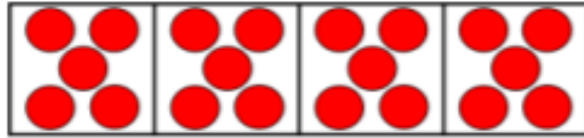
$$\frac{1}{2} \text{ of } 22 = 11$$

# Thursday -Calculate Quantities .



Copy this  
table onto a  
piece of  
paper or  
your book.

Use the counters and bar models to calculate the whole:



There are \_\_\_\_ counters in one part.

$$\frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{2}{4} = \underline{\hspace{2cm}}$$

$$\frac{3}{4} = \underline{\hspace{2cm}}$$

$$\frac{4}{4} \text{ or 1 whole} = \underline{\hspace{2cm}}$$



There are 7 counters in one part.

$$\frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{2}{4} = \underline{\hspace{2cm}}$$

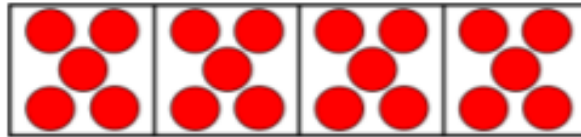
$$\frac{3}{4} = \underline{\hspace{2cm}}$$

$$\frac{4}{4} \text{ or 1 whole} = \underline{\hspace{2cm}}$$

# Thursday - Calculate Quantities - Answers .



Use the counters and bar models to calculate the whole:



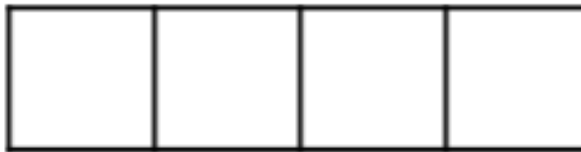
There are 5 counters in one part.

$$\frac{1}{4} = \underline{5}$$

$$\frac{2}{4} = \underline{10}$$

$$\frac{3}{4} = \underline{15}$$

$$\frac{4}{4} \text{ or 1 whole} = \underline{20}$$



There are 7 counters in one part.

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

$$\frac{2}{4} = \underline{14}$$

$$\frac{3}{4} = \underline{21}$$

$$\frac{4}{4} \text{ or 1 whole} = \underline{28}$$

# Thursday Challenge

Whole	Unit Fraction	Non-unit Fraction
The whole is 24	$\frac{1}{6}$ of 24 = ____	$\frac{5}{6}$ of 24 = ____

# Thursday Challenge Answer

Whole	Unit Fraction	Non-unit Fraction
The whole is 24	$\frac{1}{6}$ of 24 = <u>4</u>	$\frac{5}{6}$ of 24 = <u>20</u>

# Friday Challenges

Match the number stories to the correct calculations.

Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ How much do they eat altogether?	$\frac{7}{8} + \frac{3}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ less. How much do they eat altogether?	$\frac{7}{8} + \frac{4}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{3}{8}$ less. How much does Dora eat?	$\frac{7}{8} - \frac{3}{8} = -$

How many different ways can you find to solve the calculation?

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} + \frac{\square}{7}$$

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} - \frac{\square}{7}$$

# Friday Challenges - Answers

Match the number stories to the correct calculations.

Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ . How much do they eat altogether?	$\frac{7}{8} + \frac{3}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{4}{8}$ less. How much do they eat altogether?	$\frac{7}{8} + \frac{4}{8} = -$
Teddy eats $\frac{7}{8}$ of a pizza. Dora eats $\frac{3}{8}$ less. How much does Dora eat?	$\frac{7}{8} - \frac{3}{8} = -$

1<sup>st</sup> question matches with second calculation.  
2<sup>nd</sup> question with first calculation.  
3<sup>rd</sup> question with third calculation.

How many different ways can you find to solve the calculation?

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} + \frac{\square}{7}$$

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} - \frac{\square}{7}$$

Children may give a range of answers as long as the calculation for the numerators is correct.