# **Maths Planning and Ideas**



Week Commencing: 1st June 2020

Year Group: 4

**Mathematical Focus: Fractions** 

	Monday Tuesday		Wednesday	Thursday	Friday		
Area of Learning	Add 2 or more fractions	Subtract 2 fractions	Fractions of quantities	Calculate quantities	Friday Maths Challenge		
Activity	Starter:	Starter:	Starter:	Starter:	Starter:		
	Times Table Rockstar	Times Table Rockstar	Times Table Rockstar	Times Table Rockstar	Times Table Rockstar		
	Battle of the Bands and Garage challenges have been set for Y4 children.	Battle of the Bands and Garage challenges have been set for Y4 children.	Battle of the Bands and Garage challenges have been set for Y4 children.	Battle of the Bands and Garage challenges have been set for Y4 children.	Battle of the Bands and Garage challenges have been set for Y4 children.		
	Main: White Rose Maths - Watch Summer Week 6 Lesson I https://whiterosemaths.com/h omelearning/year-4/	Main: White Rose Maths - Watch Summer Week 6 Lesson 2 https://whiterosemaths.com/h omelearning/year-4/	Main: White Rose Maths - Watch Summer Week 6 Lesson 3 https://whiterosemaths.com/h omelearning/year-4/	Main: White Rose Maths - Watch Summer Week 6 Lesson 4 https://whiterosemaths.com/h omelearning/year-4/	Main: White Rose Maths - Watch Summer Week 6 Lesson 5 - Daily Challenge https://whiterosemaths.com/h		
	You might want to pause it and make notes. Or even rewind and watch bits again.	You might want to pause it and make notes. Or even rewind and watch bits again.	You might want to pause it and make notes. Or even rewind and watch bits again.	You might want to pause it and make notes. Or even rewind and watch bits again.	omelearning/year-4/ Good luck!		
	Independent: Independent:		Independent:	Independent:			
	The questions below the plan can be completed by children independently.	The questions below the plan can be completed by children independently.	The questions below the plan can be completed by children independently.	The questions below the plan can be completed by children independently.			

Answers:	Answers:	Answers:	Answers:	
Answers can be found here:				
https://resources.whiterosem	https://resources.whiterosem	https://resources.whiterosem	https://resources.whiterosem	
aths.com/wp-	aths.com/wp-	aths.com/wp-	aths.com/wp-	
content/uploads/2020/05/Less	content/uploads/2020/05/Less	content/uploads/2020/05/Less	content/uploads/2020/05/Less	
on-I-Answers-Add-2-or-	on-2-Answers-Subtract-2-	on-3-Answers-Fractions-of-a-	on-4-Answers-Calculate-	
more-fractions-2019.pdf	fractions-2019.pdf	guantity-2019.pdf	quantities-2019.pdf	
	·			
No peeking until after you				
have had a go.				

# LC: Can you add two or more fractions?

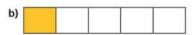
# Add 2 or more fractions



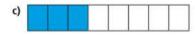
Complete the additions.



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



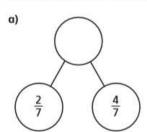
$$\frac{1}{5} + \frac{3}{5} =$$

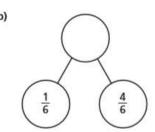


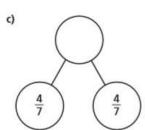
$$\frac{3}{8} + \frac{3}{8} =$$

$$\frac{3}{8} + \frac{1}{8} =$$

Complete the part-whole models.







d) Which part-whole model is the odd one out? Explain your choice to a partner. Did you both have the same answer?

Complete the additions.

a) 
$$\frac{3}{7} + \frac{3}{7} =$$

e) 
$$\frac{8}{11} + \frac{6}{11} = \boxed{}$$

b) 
$$\frac{3}{7} + \frac{4}{7} = \boxed{}$$

f) 
$$\frac{4}{11} + \frac{4}{11} + \frac{6}{11} = \boxed{}$$

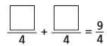
c) 
$$\frac{4}{5} + \frac{3}{5} = \boxed{}$$

g) 
$$\frac{3}{11} + \frac{3}{11} + \frac{8}{11} = \boxed{}$$

d) 
$$\frac{8}{5} + \frac{6}{5} =$$

h) 
$$\frac{3}{7} + \frac{3}{7} + \frac{8}{7} = \boxed{}$$

4



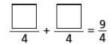
What could the missing numerators be?

Give four different possibilities.

$$\frac{\boxed{\phantom{0}}}{4} + \frac{\boxed{\phantom{0}}}{4} = \frac{9}{4}$$

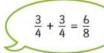
$$\frac{\boxed{\phantom{0}}}{4} + \frac{\boxed{\phantom{0}}}{4} = \frac{9}{4}$$

$$\frac{\boxed{\phantom{0}}}{4} + \frac{\boxed{\phantom{0}}}{4} = \frac{9}{4}$$



Tommy is adding fractions.





Explain why Tommy is incorrect.

Complete the number sentences.

a) 
$$\frac{3}{8} + \frac{}{8} = \frac{7}{8}$$

e) 
$$\frac{4}{9} + \frac{9}{9} = \frac{13}{9} = 1 \frac{9}{9}$$

b) 
$$\frac{3}{8} + \frac{8}{8} = \frac{1}{8}$$

f) 
$$\frac{4}{9} + \frac{9}{9} = \frac{9}{9} = 1\frac{7}{9}$$

c) 
$$\frac{3}{16} + \frac{}{} = 1$$

g) 
$$\frac{5}{7} + \frac{1}{7} + \frac{5}{7} = \frac{1}{2}$$

d) 
$$\frac{4}{9} + \frac{}{9} = \frac{11}{9} = 1 \frac{}{9}$$

h) 
$$\frac{5}{7} + \frac{1}{7} + \frac{5}{7} = 3$$

Rosie, Whitney and Teddy have each been for a walk.

Rosie walked  $\frac{5}{8}$  km.

Whitney walked  $\frac{7}{8}$  km.

Teddy walked  $\frac{3}{8}$  km.

a) How far did they walk altogether?



b) Jack also went for a walk.



Altogether the four children walked 3 km.

How far did Jack walk?

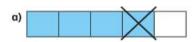


# LC: Can you subtract fractions?

### **Subtract 2 fractions**



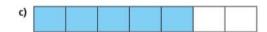
Complete the subtractions.



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



$$\frac{4}{5} - \frac{2}{5} =$$



$$\frac{5}{7} - \frac{3}{7} =$$



$$\frac{7}{9} - \frac{4}{9} =$$

Complete the calculations.

a) 
$$\frac{7}{10} - \frac{3}{10} =$$

e) 
$$\frac{9}{11} - \frac{3}{11} =$$

b) 
$$\frac{2}{3} - \frac{1}{3} =$$

f) 
$$\frac{6}{7} - \frac{4}{7} =$$

c) 
$$\frac{6}{6} - \frac{6}{6} =$$

c) 
$$\frac{6}{6} - \frac{6}{6} =$$
 g)  $\frac{8}{93} - \frac{2}{93} =$ 

d) 
$$\frac{3}{4} - \frac{1}{4} =$$

d) 
$$\frac{3}{4} - \frac{1}{4} =$$
 h)  $\frac{10}{991} - \frac{3}{991} =$ 

Complete the subtractions

a) 
$$\frac{9}{5} - \frac{6}{5} =$$

e) 
$$\frac{8}{3} - \frac{4}{3} =$$

b) 
$$\frac{9}{5} - \frac{5}{5} =$$

f) 
$$\frac{11}{3} - \frac{4}{3} = \boxed{}$$

c) 
$$\frac{9}{5} - \frac{4}{5} =$$

g) 
$$\frac{14}{3} - \frac{4}{3} = \boxed{}$$

d) 
$$\frac{9}{2} - \frac{4}{2} =$$

h) 
$$\frac{15}{3} - \frac{5}{3} =$$

Jack has  $2\frac{1}{4}$  kg of potatoes.

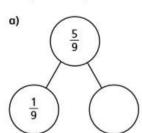


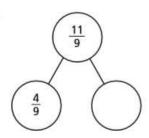
He uses  $\frac{5}{4}$  kg of potatoes.

How many kilograms does he have left?

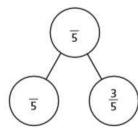


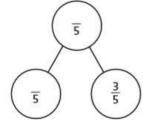
Complete the part-whole models.





Complete the part-whole model in two different ways.





Fill in the missing numerators.

a) 
$$\frac{10}{11} - \frac{1}{11} = \frac{7}{11}$$
 d)  $\frac{15}{4} - \frac{1}{4} = 2$ 

d) 
$$\frac{15}{4} - \frac{15}{4} = 2$$

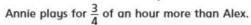
b) 
$$\frac{10}{11} - \frac{1}{11} = \frac{7}{11} - \frac{4}{11}$$
 e)  $\frac{9}{4} - \frac{1}{4} = \frac{1}{4} + 1$ 

e) 
$$\frac{9}{4} - \frac{1}{4} = \frac{4}{4} + \frac{1}{4}$$

c) 
$$\frac{10}{11} - \frac{4}{11} = \frac{1}{11} - \frac{7}{1}$$

c) 
$$\frac{10}{11} - \frac{4}{11} = \frac{1}{11} - \frac{7}{11}$$
 f)  $\frac{11}{4} - \frac{3}{4} = \frac{11}{3} - \frac{1}{3}$ 

Alex and Annie are taking turns playing a computer game. Annie plays for a total of  $2\frac{1}{4}$  hours.



How much time do they spend in total playing on the game?

hours
nour

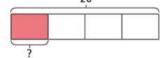
# LC: Can you find fractions of quantities?

# Fractions of a quantity

Complete the number sentences.

a) 
$$\frac{1}{4}$$
 of 20 =

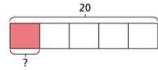
d) 
$$\frac{1}{4}$$
 of 40 =

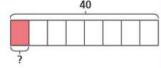




b) 
$$\frac{1}{5}$$
 of 20 =

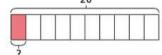
e) 
$$\frac{1}{8}$$
 of 40 =

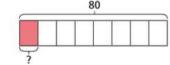




c) 
$$\frac{1}{10}$$
 of 20 =

f) 
$$\frac{1}{8}$$
 of 80 =



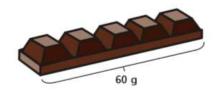


g) 
$$\frac{1}{3}$$
 of 36 =

h) 
$$\frac{1}{6}$$
 of 36 =

195	22	-	7.2	
			$\neg$	

Filip has a chocolate bar with 5 equal pieces.
The chocolate bar weighs 60 g.



a) What is the mass of one piece?

The mass of one piece is g.

b) Filip eats  $\frac{3}{5}$  of the bar of chocolate. How many grams does Filip eat?

Filip eats	g	of chocolate

- Complete the number sentences.
  - a)  $\frac{1}{4}$  of 24 = c)  $\frac{1}{8}$  of 32 =
- - $\frac{3}{4}$  of 24 =  $\frac{5}{8}$  of 32 =
  - b)  $\frac{1}{7}$  of 35 =
- d)  $\frac{5}{8}$  of 64 =
- $\frac{3}{7}$  of 35 =  $\frac{7}{8}$  of 64 =
- $\frac{5}{7}$  of 35 =
- $\frac{10}{8}$  of 64 =

Match the calculations to the answers.

$$\frac{2}{3}$$
 of 18

18

$$\frac{5}{6}$$
 of 18

15

$$\frac{9}{10}$$
 of 20

16

$$\frac{4}{5}$$
 of 20

12

a) Write each calculation in the correct circle.

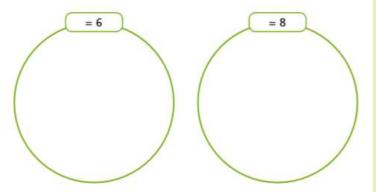
$$\frac{1}{2}$$
 of 16

$$\frac{1}{4}$$
 of 24

$$\frac{2}{3}$$
 of 9

$$\frac{1}{2}$$
 of 16  $\frac{1}{4}$  of 24  $\frac{2}{3}$  of 9  $\frac{3}{2}$  of 4  $\frac{1}{6}$  of 48





- b) Write one more calculation in each circle.
- Write <, > or = to compare the calculations.

a) 
$$\frac{2}{7}$$
 of 21  $\frac{2}{3}$  of 21

b) 
$$\frac{3}{5}$$
 of 40  $\frac{2}{3}$  of 36

c) 
$$\frac{6}{8}$$
 of 40  $\frac{3}{4}$  of 40

d) 
$$\frac{6}{10}$$
 of 50  $\frac{3}{10}$  of 100

# LC: Can you calculate quantities?

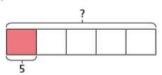
# Calculate quantities

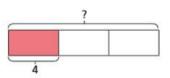
White Rose Maths

Match the calculations to the bar models.

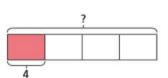
Work out the missing quantities.

$\frac{1}{4}$ of	-	= 5

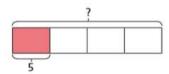




$$\frac{1}{5}$$
 of  $= 5$ 



$$\frac{1}{3}$$
 of  $=4$ 



Complete the sentences.

a)	When	one	fifth	is	1,	the	whole	is	
----	------	-----	-------	----	----	-----	-------	----	--

When one fifth is 10, the whole is

When one fifth is 20, the whole is

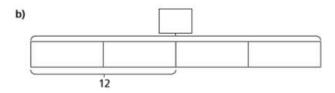
b) When 
$$\frac{1}{7}$$
 is 2, the whole is

When  $\frac{1}{7}$  is 4, the whole is

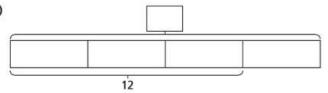
When  $\frac{1}{7}$  is 8, the whole is

Complete the bar models and fill in the whole.

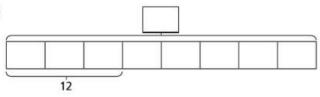
12 12 12 12



c)

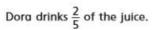


d)



- Complete the calculations.
  - a)  $\frac{1}{2}$  of = 30
- e)  $\frac{3}{7}$  of = 1!
- b)  $\frac{1}{2}$  of = 1!
- f)  $\frac{5}{7}$  of = 15
- c)  $\frac{1}{4}$  of = 15
- g)  $\frac{5}{7}$  of = 35
- d)  $\frac{3}{4}$  of = 15
- h)  $\frac{7}{5}$  of = 35

Dora and Mo have a full bottle of juice.



Mo drinks  $\frac{1}{5}$  of the juice.

There is 150 ml of juice left in the bottle.

How much juice was in the full bottle?

ml

Rosie and Ron are collecting red and blue counters.

They have the same number of blue counters.

They have a different number of red counters.





a) How many counters does Ron have altogether?

b) How many red counters do they each have?

Rosie has red counters.

Ron has red counters.

#### Where can I complete further work?

<u>Twinkl</u> – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, PowerPoints and interactive games to support all areas of learning.

<u>Classroom Secrets</u> – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

White Rose Maths – Free Maths home learning resources for all ages. Watch the videos and try the questions.

Primary Stars – Free Maths home learning packs for Year 1 and 2.

BBC Bitesize Primary – Free learning resources available for KS1 and KS2 across all subjects.

<u>I See Maths</u> – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

<u>Top Marks</u> – Free educational resources and games for English and Maths.

ICT Games – Free educational resources and games for English and Maths.