Class 3 Home Learning, week beginning 18th May 2020

Maths - Year 3

Summer Term, Week 2
(w/c 27 April)

Lesson 1
Add fractions

Please watch the video before choosing your challenge.

Why not have a go at the reasoning
and problem solving too?

For all of you who are (or not?!) loving fractions, this
is the last week for a little while... :-)

<u>Can I add fractions?</u>

Challenge 1

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 with a ruler. Remember to write the question number too!

Questions 1-4 in the answers are questions 1-4 in this challenge.

1) Copy and complete the additions in your maths book. You do not have to draw the bar models.
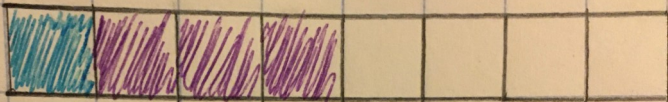
Use the bar models to help you.

a) $\frac{1}{3} + \frac{1}{3} =$ ☐

b) $\frac{1}{5} + \frac{1}{5} =$ ☐

c) $\frac{1}{5} + \frac{2}{5} =$ ☐

d) $\frac{1}{5} + \frac{3}{5} =$ ☐

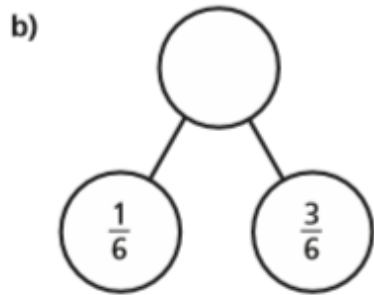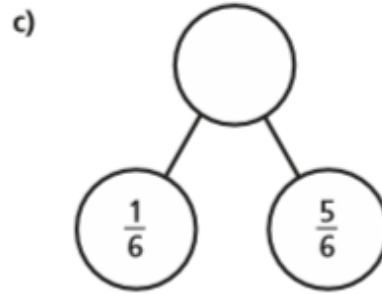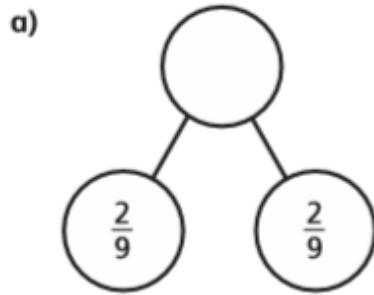2) Copy and complete the additions in your maths book. Draw bar models to help you. I have done the first one for you.

a) $\frac{1}{8} + \frac{3}{8} = \frac{4}{8}$

b) $\frac{5}{8} + \frac{1}{8} =$ ☐

c) $\frac{3}{8} + \frac{3}{8} =$ ☐

d) $\frac{5}{8} + \frac{3}{8} =$ ☐

3) Copy and complete.

a)

$\frac{2}{9}$ $\frac{2}{9}$

b)

$\frac{1}{6}$ $\frac{3}{6}$

c)

$\frac{1}{6}$ $\frac{5}{6}$

Which part-whole model is the odd one out? _____

4) Draw a bar model to help you solve this question.

Alex and Huan are eating a cake.

Alex eats $\frac{4}{7}$ of the cake.

Huan eats $\frac{2}{7}$ of the cake.

What fraction of the cake have they eaten altogether?

They have eaten ☐ of the cake altogether.

<u>Can I add fractions?</u>

Challenge 2

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 with a ruler. Remember to write the question number too!

> Questions 4-7 in the answers are questions 1-4 in this challenge.

1) Draw a bar model to help you solve this question. Look at question 2a in Challenge 1 for an example.

Alex and Huan are eating a cake.

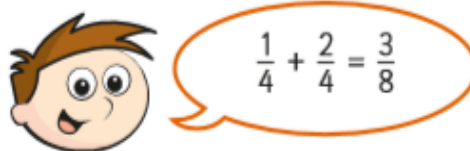Alex eats $\frac{4}{7}$ of the cake.

Huan eats $\frac{2}{7}$ of the cake.

What fraction of the cake have they eaten altogether?

They have eaten ☐ of the cake altogether.

2) In question a, what was Teddy's mistake?

Teddy is adding fractions.

$\frac{1}{4} + \frac{2}{4} = \frac{3}{8}$

a) Draw a bar model to show that Teddy is wrong.

b) Complete the addition $\frac{1}{4} + \frac{2}{4} = $ ☐

3) Copy and complete the table in your maths book.

Annie has baked 12 muffins.

She puts them into 2 boxes.

What fraction of the muffins could she put in each box?

Complete the table to show different possibilities.

One has been done for you.

Box 1	Box 2
$\dfrac{1}{12}$	$\dfrac{11}{12}$

Are there any other possibilities?

4) Copy and complete the additions.

a) $\dfrac{3}{8} + \dfrac{4}{8} = \boxed{}$

b) $\dfrac{3}{9} + \dfrac{4}{9} = \boxed{}$

c) $\dfrac{3}{29} + \dfrac{4}{29} = \boxed{}$

d) $\dfrac{3}{103} + \dfrac{4}{103} = \boxed{}$

e) $\dfrac{5}{31} + \dfrac{9}{31} = \boxed{}$

f) $\dfrac{17}{111} + \dfrac{33}{111} = \boxed{}$

<u>Can I add fractions?</u>   Reasoning and problem solving

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 with a ruler. Remember to write the question number too!

1)

Rosie and Whitney are solving:

$$\frac{4}{7} + \frac{2}{7}$$

Rosie says,

The answer is $\frac{6}{7}$

Whitney says,

The answer is $\frac{6}{14}$

Who do you agree with?
Explain why.

2)

Mo and Teddy share these chocolates.

They both eat an odd number of chocolates.
Complete this number sentence to show what fraction of the chocolates they each could have eaten.

$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{12}{12}$$

Answers are on the next page.

Reasoning and Problem Solving

Rosie and Whitney are solving:

$$\frac{4}{7} + \frac{2}{7}$$

Rosie says,

The answer is $\frac{6}{7}$

Whitney says,

The answer is $\frac{6}{14}$

Who do you agree with?
Explain why.

Rosie is correct. Whitney has made the mistake of also adding the denominators. Children could prove why Whitney is wrong using a bar model or strip diagram.

Mo and Teddy share these chocolates.

Fine Chocolates

They both eat an odd number of chocolates.

Complete this number sentence to show what fraction of the chocolates they each could have eaten.

$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{12}{12}$$

Possible answers:

$$\frac{1}{12} + \frac{11}{12}$$

$$\frac{3}{12} + \frac{9}{12}$$

$$\frac{5}{12} + \frac{7}{12}$$

(In either order)