Year 3
Maths Answers
Week 8- Additional answers/feedback to support with learning in Maths

Day 1
Starter:

1 Use the strips above to help you answer the following questions. Circle the correct answers:

a Which is bigger? $\frac{3}{4}$ or $\frac{4}{8}$ **b** Which is smaller? $\frac{2}{10}$ or $\frac{2}{8}$ **c** Which is smaller? $\frac{2}{4}$ or $\frac{3}{12}$

Main Activity

The answers are given at the end of the video provided.
https://www.thenational.academy/year-3/maths/fractions-finding-equivalent-fractions-year-3-wk3-1#slide-1

HOTS

Sort the fractions into the table.

	Fractions equal to one whole	Fractions less than one whole
Unit fractions		
Non-unit fractions		

Are there any boxes in the table empty? Why?

$\frac{3}{4}$	$\frac{3}{5}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{2}{2}$	$\frac{4}{4}$	$\frac{2}{5}$	$\frac{1}{2}$

Top left: Empty

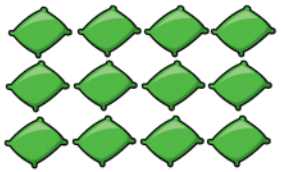
Top right: $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{2}$

Bottom left: $\frac{2}{2}$ and $\frac{4}{4}$

Bottom right: $\frac{3}{4}$, $\frac{3}{5}$ and $\frac{2}{5}$

There are no unit fractions that are equal to one whole other than $\frac{1}{1}$ but this isn't in our list.

This is $\frac{3}{4}$ of a set of beanbags.



How many were in the whole set?

16

Complete the sentence.

When a fraction is equal to a whole, the numerator and the denominator are _____

Use pictures to prove your answer.

The same/equal

Children may draw a range of pictures to prove this statement.

Day 2

Starter:

6 Use the number lines above to help you put these fractions in order from smallest to largest:

a $\frac{8}{12}$ $\frac{1}{2}$ $\frac{2}{6}$ — $\frac{2}{6}$ $\frac{1}{2}$ $\frac{8}{12}$

b $\frac{1}{4}$ $\frac{2}{6}$ $\frac{1}{12}$ — $\frac{1}{12}$ $\frac{1}{4}$ $\frac{2}{6}$

c $\frac{3}{4}$ $\frac{1}{2}$ $\frac{5}{12}$ — $\frac{5}{12}$ $\frac{1}{2}$ $\frac{3}{4}$

d $\frac{5}{6}$ $\frac{1}{3}$ $\frac{1}{4}$ — $\frac{1}{4}$ $\frac{1}{3}$ $\frac{5}{6}$

Main Activity

The answers are given at the end of the video provided.

https://www.thenational.academy/year-3/maths/fractions-finding-equivalent-fractions-year-3-wk3-2

HOTS

Mo makes 3 rugby shirts.

Each rugby shirt uses 150 cm of material.

He has a 600 cm roll of material.

How much material is left after making the 3 shirts?

What fraction of the original roll is left over?

150 cm

This is $\frac{1}{4}$ of his original roll of material.

Alex and Eva share a bottle of juice.

Alex drinks $\frac{3}{5}$ of the juice.

Eva drinks 200 ml of the juice.

One fifth of the juice is left in the bottle.

How much did Alex drink?

What fraction of the bottle did Eva drink?

What fraction of the drink is left?

Alex drank 600 ml of the juice.

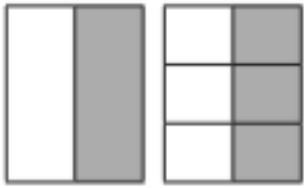
Eva drank one fifth of the juice.

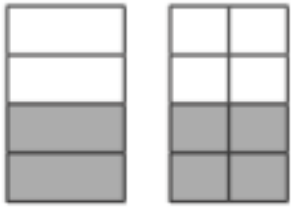
The fraction of juice left is $\frac{1}{5}$ of the bottle.

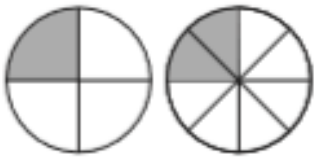
Day 3

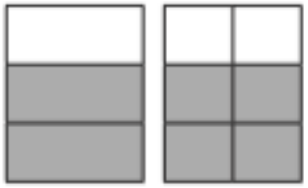
Starter:

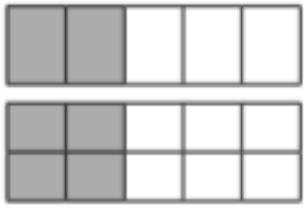
3 Write the equivalent fraction for each of these:

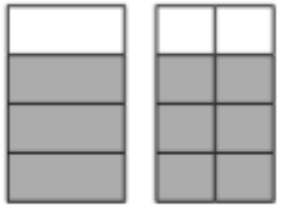
a  $\frac{1}{2} = \frac{\boxed{3}}{6}$

b  $\frac{2}{4} = \frac{\boxed{4}}{8}$

c  $\frac{1}{4} = \frac{\boxed{2}}{8}$

d  $\frac{2}{3} = \frac{\boxed{4}}{6}$

e  $\frac{2}{5} = \frac{\boxed{4}}{10}$

f  $\frac{3}{4} = \frac{\boxed{6}}{8}$

Main Activity

The answers are given at the end of the video provided.

https://www.thenational.academy/year-3/maths/fractions-adding-fractions-with-the-same-denominator-year-3-wk3-3

HOTS

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.

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)

Day 4

Starter:

1 **Add these fractions. One of your answers is equivalent to one whole. Circle it.**

a $\frac{1}{3} + \frac{1}{3} = \boxed{\frac{2}{3}}$ **b** $\frac{1}{5} + \frac{1}{5} = \boxed{\frac{2}{5}}$ **c** $\frac{3}{8} + \frac{2}{8} = \boxed{\frac{5}{8}}$

d $\frac{3}{10} + \frac{6}{10} = \boxed{\frac{9}{10}}$ **e** $\frac{3}{5} + \frac{1}{5} = \boxed{\frac{4}{5}}$ **f** $\frac{5}{6} + \frac{1}{6} = \boxed{1}$

Main Activity

The answers are given at the end of the video provided.

https://www.thenational.academy/year-3/maths/fractions-subtracting-fractions-with-the-same-denominator-year-3-wk3-4

HOTS

Find the missing fractions:

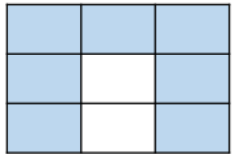
$\frac{7}{7} - \frac{3}{7} = \frac{2}{7} + \square$

$\square - \frac{5}{9} = \frac{4}{9} - \frac{2}{9}$

$\frac{7}{7} - \frac{3}{7} = \frac{2}{7} + \frac{2}{7}$

$\frac{7}{9} - \frac{5}{9} = \frac{4}{9} - \frac{2}{9}$

How many fraction addition and subtractions can you make from this model?

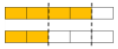


There are lots of calculations children could record. Children may even record calculations where there are more than 2 fractions e.g. $\frac{3}{9} + \frac{1}{9} + \frac{3}{9} = \frac{7}{9}$ Children may possibly see the red representing one fraction and the white another also.

Jack and Annie are solving $\frac{4}{5} - \frac{2}{5}$

Jack's method:

Annie's method:



They both say the answer is two fifths. Can you explain how they have found their answers?

Jack has taken two fifths away. Annie has found the difference between four fifths and two fifths.

Day 5

Starter:

Adding and subtracting fractions – word problems

1 **Solve these addition and subtraction fraction problems.**

a I cut up a pizza into quarters. I eat one quarter.

What fraction of the pizza is left? **¾**

b Jo bakes a cake and cuts it into eighths. Her friend Sarah eats $\frac{1}{8}$ of it and Jo eats $\frac{2}{8}$.

How much of the cake have they eaten altogether? $\frac{3}{8}$

How much is left? **5/8**

c Lisa is working out equivalent fraction problems. She finds several equivalent fractions that are the same as one half, but she thinks she might have made one mistake.

Can you find it and cirlce it? $\frac{4}{8}$ $\frac{2}{4}$ $\frac{6}{10}$ $\frac{3}{6}$

Main Activity

The answers are given at the end of the video provided.

https://www.thenational.academy/year-3/maths/fractions-revising-fractions-year-3-wk3-5

HOTS

Fill in the Blanks

$\frac{1}{3}$ of 60 = $\frac{1}{4}$ of ☐ — 80

☐ of 50 = $\frac{1}{5}$ of 25 — 10

Ron has £28

On Friday, he spent $\frac{1}{4}$ of his money.

On Saturday, he spent $\frac{2}{3}$ of his remaining money and gave £2 to his sister.

On Sunday, he spent $\frac{1}{5}$ of his remaining money.

How much money does Ron have left?

What fraction of his original amount is this?

Ron has £4 left.

This is $\frac{1}{7}$ of his original amount.

Whitney has 12 chocolates.

On Friday, she ate $\frac{1}{4}$ of her chocolates and gave one to her mum.

On Saturday, she ate $\frac{1}{2}$ of her remaining chocolates, and gave one to her brother.

On Sunday, she ate $\frac{1}{3}$ of her remaining chocolates.

How many chocolates does Whitney have left?

Whitney has two chocolates left.