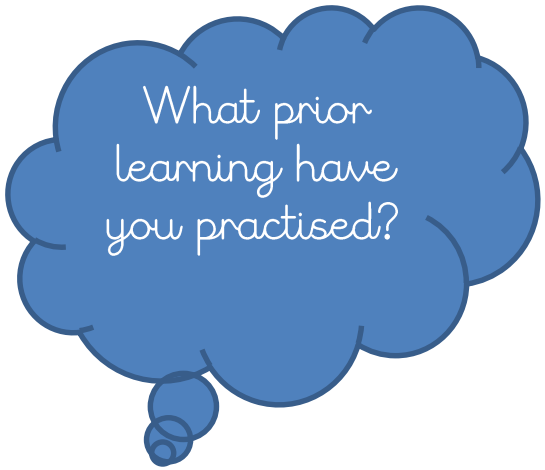


Linked to the previous session, discuss and complete the following activity:

1. 2/3 + 4/9 =
2. ½ + 1/8 =
3. 1/6 + 4/18 =
4. 3/4 + 1/24 =

WALT: Add 3 or more fractions

Introduction

How would you calculate ....

2/9 + 3/9 + 1/9

I would add the numerators together because the denominators are the same meaning we do not need to find the common denominator.

6/9

How would you calculate ....

2/9 + 3/9 + 1/3

I would write out my 3- and 9-times tables and find the lowest common denominator which is 9. I would then convert 1/3 into 9ths. After this I would then add all the numerators together.

8/9

Introduction

Let's have a look at another one together:

1/5 + 2/10 + 3/10

On your whiteboard have ago at:

1) 2/8 + ¼ + 3/8 =

2) 1/6 + 2/6 + 1/3 =

Introduction

How would you calculate... $\frac{1}{3} + \frac{1}{6} + \frac{1}{12}$?

$\frac{1}{3} + \frac{1}{6} + \frac{1}{12} =$

Step 1
Work out what number all of the denominators will go into (use your x table knowledge to help you to work this out)
3, 6 and 12 will all go into .

Step 2
Use your knowledge of equivalent fractions to convert the fractions so that they all have the same denominator

x by 4 → $\frac{1}{3} = \frac{4}{12}$

x by 4

x by 2 → $\frac{1}{6} = \frac{2}{12}$

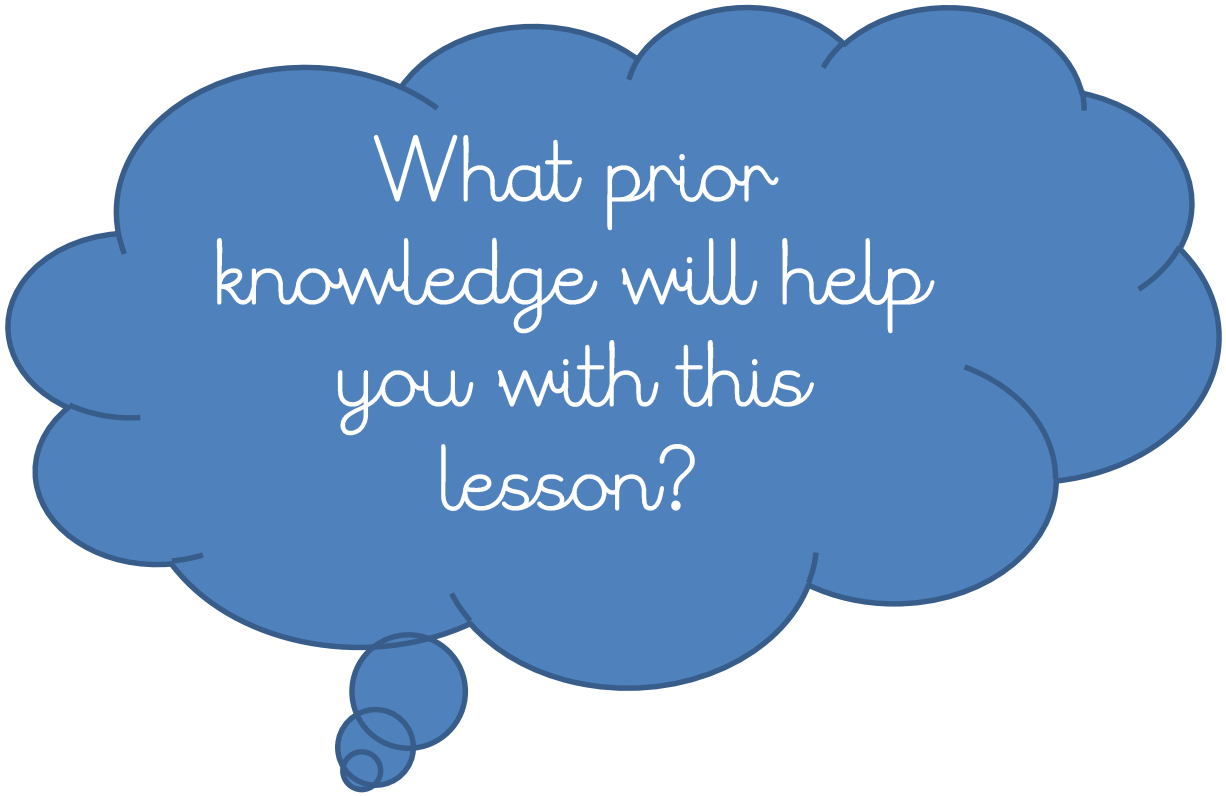
x by 2

4/12

2/12

Step 3
Add the numerators

$\frac{1}{3} + \frac{1}{6} + \frac{1}{12} = \frac{7}{12}$



Can you think of any times when you would add 3 or more fractions in real-life situations?

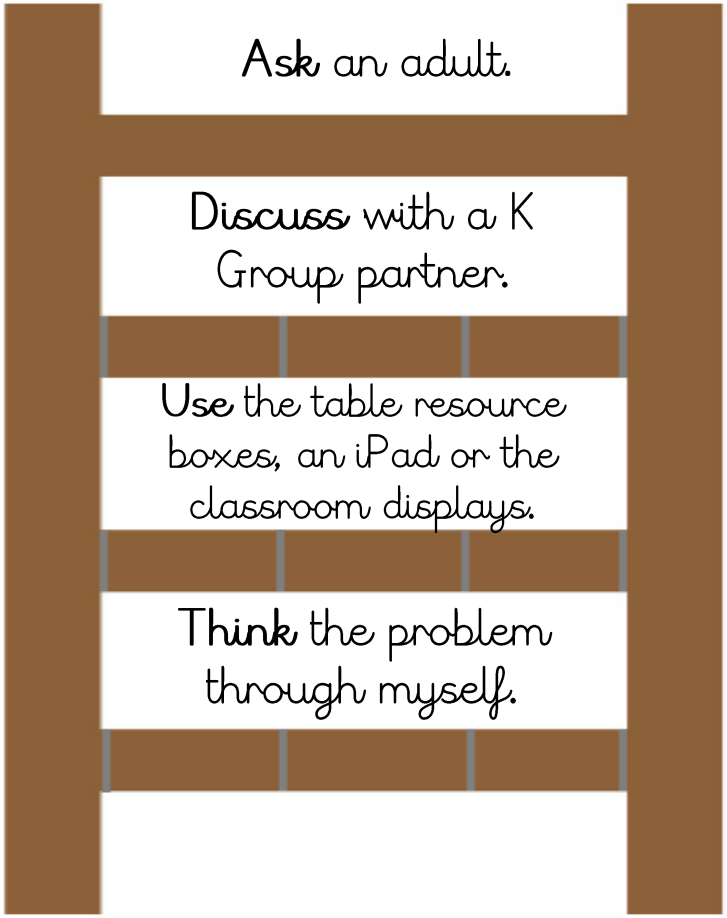
Key Vocabulary

- Add
- Equivalent
- Same
- Equal
- Fraction
- Divide
- Share
- Denominator
- Numerator

Use the class maths display and your table top resource pack to generate your own examples of key vocabulary too.

What will a WAGOLL for adding 3 or more fractions?

Where can I go for help if I'm feeling too crispy?



Think ➡ Use ➡ Discuss ➡ Ask

Fluency 1a – Do it!

1) 1/3 + 4/9

2) 2/5 + 3/10

3) ¼ + 3/8

4) 2/3 + 2/6

5) 2/9 +3/18

6) 1/5 + 4/10

Fluency 1a – Do it!- ANSWERS

1) 1/3 + 4/9 = 7/9

2) 2/5 + 3/10 = 7/10

3) ¼ + 3/8 = 5/8

4) 2/3 + 2/6 = 6/6 **or** 1

5) 2/9 + 3/18 = 7/18

6) 1/5 + 4/10 = 6/10

Fluency 1b – Do it!

1) 1/6 + 2/6 + 1/3

2) 2/10 + 1/5 + 3/10

3) 3/12 + 1/12 + 2/3

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

5) $\frac{1}{6} + \frac{1}{3} + \frac{5}{12} =$ ☐

6) $\frac{1}{4} + \frac{1}{8} + \frac{1}{16} =$ ☐

Fluency 1b – Do it! - ANSWERS

1) 1/6 + 2/6 + 1/3 = **5/6**

2) 2/10 + 1/5 + 3/10 = **7/10**

3) 3/12 + 1/12 + 2/3 = **12/12 or 1**

$\frac{1}{2} + \frac{1}{4} + \frac{1}{8} = \boxed{\frac{7}{8}}$

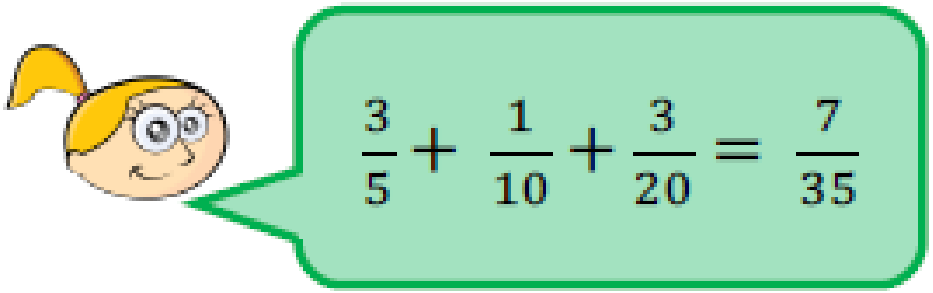
$\frac{1}{6} + \frac{1}{3} + \frac{5}{12} = \boxed{\frac{11}{12}}$

$\frac{1}{4} + \frac{1}{8} + \frac{1}{16} = \boxed{\frac{7}{16}}$

Reasoning - Secure it!

Zoe is attempting to answer:

$$\frac{3}{5} + \frac{1}{10} + \frac{3}{20}$$



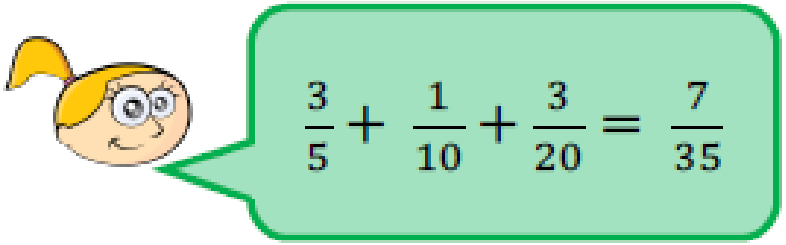
Use your sentence starters to help.
E.g. Because,,, I already know.... Using this knowledge...
Once I found this out...

** Highlight your sentence starters in green and key vocabulary in yellow.

Reasoning – Secure it! Answers

Zoe is attempting to answer:

$$\frac{3}{5}+\frac{1}{10}+\frac{3}{20}$$



Do you agree with Zoe?
Explain why.

Possible answer:
Zoe is wrong because she has added the numerators and denominators together and hasn't found a common denominator.

Problem solving - Deepen it!

Sam has added 3 fractions together to get an answer of $\frac{17}{18}$

What 3 fractions could he have added?

Can you find more than one answer?

Use your sentence starters in your explanations.

** Highlight your sentence starters in green and key vocabulary in yellow.

Problem solving – Deepen it!

ANSWERS

Sam has added 3 fractions together to get an answer of $\frac{17}{18}$

What 3 fractions could he have added?

Can you find more than one answer?

Children use their knowledge of multiples to find different possible answers.

Some may include:

$\frac{1}{9}+\frac{5}{9}+\frac{5}{18}$

$\frac{1}{6}+\frac{5}{9}+\frac{2}{9}$

$\frac{1}{18}+\frac{1}{6}+\frac{13}{18}$

$\frac{1}{3}+\frac{1}{6}+\frac{4}{9}$

Plenary

Remember to use an emoji to show how well you understood the WALT

Evaluate and assess your K group partner's work against the criteria in the WAGOLL.

Choose one of the sentence starters to assess your learning/understanding.

The answer is 9/20 and at least 3 fractions were added together. What could the question have been?