

Maths

W.b. 1st February 2021

Year 5 Home Learning

Wibsey Primary School

Monday 1st February

Complete the questions

LO I can add and subtract fraction with common denominators

BLP: Making Links 7

Fluency

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

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

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

4) $\frac{2}{3} + \frac{2}{3} =$

5) $\frac{7}{8} + \frac{7}{8} =$

6) $\frac{6}{7} - \frac{3}{7} =$

7) $\frac{8}{9} - \frac{5}{9} =$

8) $\frac{4}{10} - \frac{3}{10} =$

9) $\frac{4}{5} - \frac{3}{5} =$

10) $\frac{2}{6} - \frac{1}{6} =$

Fluency

1) $\frac{1}{3} + \square = \frac{2}{3}$

2) $\square + \frac{6}{7} = \frac{11}{7}$

3) $\square + \frac{1}{2} = 1$

4) $\frac{5}{11} + \square = \frac{12}{11}$

HOTS – show your workings out in your book.

In a hockey team, $\frac{2}{11}$ of the team are French, $\frac{2}{11}$ are Italian, $\frac{3}{11}$ are Scottish and the rest are English.

What fraction of the team is English?

Monday 1st February – CHALLENGE QUESTIONS

How many different ways can you balance the equation?

$$\frac{5}{9} + \frac{\square}{9} = \frac{8}{9} + \frac{\square}{9}$$

Calculate:

$$\frac{3}{7} + \frac{5}{7} = \frac{\square}{\square} + \frac{4}{7}$$

$$\frac{9}{5} - \frac{5}{5} = \frac{6}{5} - \frac{\square}{\square}$$

$$\frac{2}{3} + \frac{\square}{\square} = \frac{11}{3} - \frac{4}{3}$$

A chocolate bar has 12 equal pieces.

Amir eats $\frac{5}{12}$ more of the bar than Whitney.

There is one twelfth of the bar remaining.

What fraction of the bar does Amir eat?

What fraction of the bar does Whitney eat?

Tuesday 2nd February

Complete the questions

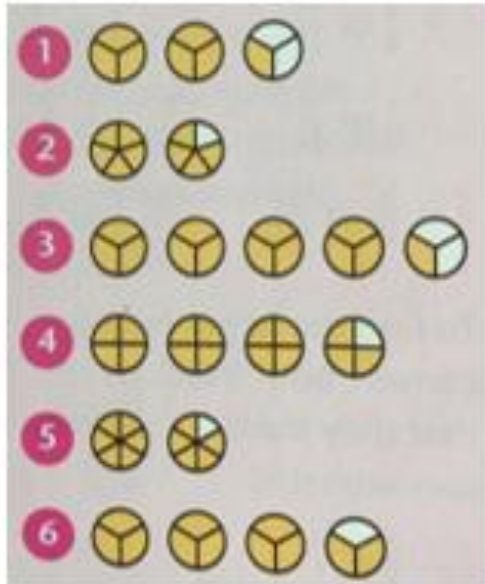
LO: I can recognise mixed numbers and improper fractions and convert from one form to the other.

BLP: Distilling 1, Making Links 5.

Fluency

Write the shaded area as:

- an improper fraction
- a mixed number



Fluency

Convert the improper fractions to mixed numbers.

- $7/5 = 1 \frac{?}{?}$
- $13/4 = \frac{?}{?}$
- $9/2 = \frac{?}{?}$

Convert the mixed numbers to improper fractions.

- $4 \frac{3}{4}$
- $2 \frac{5}{7}$
- $3 \frac{3}{10}$

Fluency/ Problem Solving

- Spot and *explain* the mistake.

$$\frac{13}{5} = 3 \frac{3}{5}$$

- A pizza has 8 slices. At a part, 2 full pizzas and 3 slices are left over. Write this as an improper fraction.
- Pencils are packed 6 to a box. A teacher hands them out and has $15/6$ left. Write this as a mixed number.

Tuesday 2nd February – CHALLENGE QUESTIONS

Amir says,

$\frac{28}{3}$ is less than $\frac{37}{5}$
because 28 is less than
37



Do you agree?
Explain why.

Spot the mistake

- $\frac{27}{5} = 5\frac{1}{5}$
- $\frac{27}{3} = 8$
- $\frac{27}{4} = 5\frac{7}{4}$
- $\frac{27}{10} = 20\frac{7}{10}$

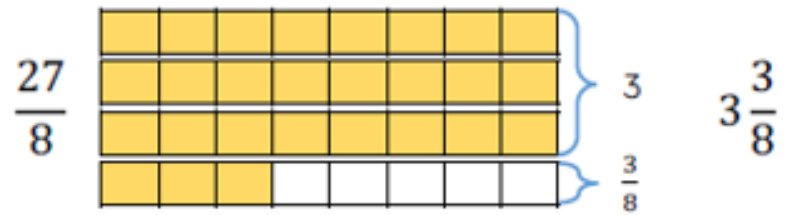
What mistakes have been made?

Can you find the correct answers?

LO – I can use reasoning and problem solving to convert between improper and mixed fractions.

Fluency

Steve converts the improper fraction $\frac{27}{8}$ into a mixed number using bar models.



Use Steve's method to convert $\frac{38}{8}$, $\frac{27}{6}$, $\frac{47}{7}$ and $\frac{32}{4}$

Reasoning

William says,

$\frac{28}{3}$ is less than $\frac{37}{5}$
because 28 is less than 37



Do you agree?
Explain why.

Problem Solving

Six pizzas are bought for a party. They are cut into 8 equal slices. At the end of the party, there are 13 slices of pizza left.



Lewis

There is $1 \frac{3}{8}$ left.



Shelley

There is $1 \frac{3}{4}$ left.

Who is correct? Prove it.

HOTS

Spot the mistake

- $\frac{27}{5} = 5 \frac{1}{5}$
- $\frac{27}{3} = 8$
- $\frac{27}{4} = 5 \frac{7}{4}$
- $\frac{27}{10} = 20 \frac{7}{10}$

Can you find the correct answers?

Wednesday 3rd February – CHALLENGE QUESTIONS

Three children have incorrectly converted $3\frac{2}{5}$ into an improper fraction.



Annie

$$3\frac{2}{5} = \frac{6}{15}$$



Mo

$$3\frac{2}{5} = \frac{15}{5}$$



Dexter

$$3\frac{2}{5} = \frac{32}{5}$$

What mistake has each child made?

Fill in the missing numbers.

How many different possibilities can you find for each equation?

$$2\frac{\square}{8} = \frac{\square}{8}$$

$$2\frac{\square}{5} = \frac{\square}{5}$$

Compare the number of possibilities you found.

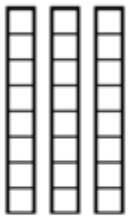
Thursday 4th February

Complete the questions

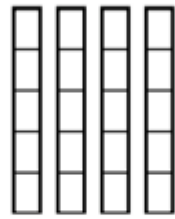
L.O. I can multiply proper fractions by whole numbers, supported by materials and diagrams
BLP: Meta-learning 3, Distilling 4

Fluency

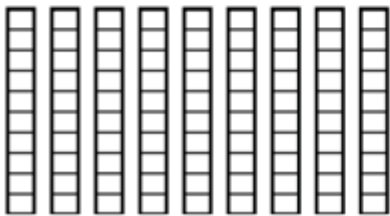
1) $\frac{5}{8} \times 3 =$



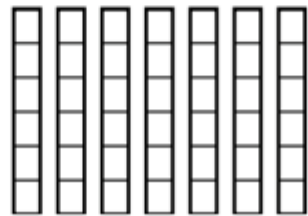
2) $\frac{1}{5} \times 4 =$



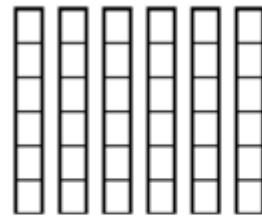
3) $\frac{8}{10} \times 9 =$



4) $\frac{3}{6} \times 7 =$



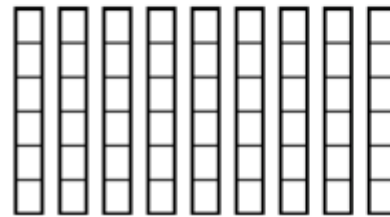
5) $\frac{5}{6} \times 6 =$



6) $\frac{8}{10} \times 2 =$



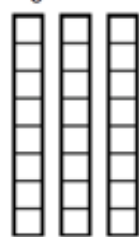
7) $\frac{1}{6} \times 9 =$



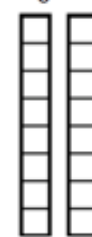
8) $\frac{1}{5} \times 2 =$



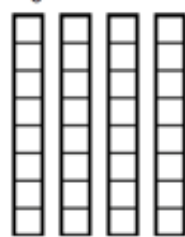
9) $\frac{1}{8} \times 3 =$



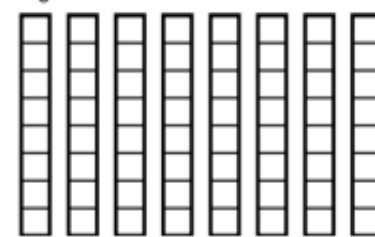
10) $\frac{4}{8} \times 2 =$



11) $\frac{2}{8} \times 4 =$



12) $\frac{6}{8} \times 8 =$



Thursday 4th February – CHALLENGE QUESTIONS

Amir is multiplying fractions by a whole number.



$$\frac{1}{5} \times 5 = \frac{5}{25}$$

Can you explain his mistake?

Always, sometimes, never?

When you multiply a unit fraction by the same number as its denominator the answer will be one whole.

I am thinking of a unit fraction.

When I multiply it by 4 it will be equivalent to $\frac{1}{2}$

When I multiply it by 2 it will be equivalent to $\frac{1}{4}$

What is my fraction?

What do I need to multiply my fraction by so that my answer is equivalent to $\frac{3}{4}$?

Can you create your own version of this problem?

Friday 5th February

Complete the arithmetic sheet – Week 3. This is available on the website and Google Classroom.

The answers are on the final page – no peeking!