1.2.21   Fractions

Learning Objective:
We are learning to convert mixed numbers to improper fractions.

I will be successful if:
- I can use my knowledge of times tables to convert mixed numbers to improper fractions.
- I can use the terms numerator and denominator in my explanations.
- I can identify whole fractions.

Key Vocabulary

fractions as part of a whole
equal
representations
shapes
quantities
numerator
denominator
non-unit and unit fractions

1) Write an equivalent fraction for $\frac{1}{5}$

2) What is the missing denominator? $\frac{3}{5} = \frac{12}{\underline{\hphantom{00}}}$

3) Work out 18^2

4) Round 2,394 to the nearest 100

White Rose Maths

Challenge

5) 35 – 17 = Half of .....

6) 63 – 19 = Half of .....

7) 108 – 60 = Double .....

8) 112 – 32 = Double .....

Flashback 4

1) Write an equivalent fraction for $\frac{1}{5}$

   $\frac{2}{10}$ $\frac{3}{15}$ $\frac{4}{20}$ $\frac{5}{25}$ $\frac{10}{50}$ Various answers

2) What is the missing denominator? $\frac{3}{5} = \frac{12}{20}$

3) Work out 18^2 324

4) Round 2,394 to the nearest 100   2,400

White Rose Maths

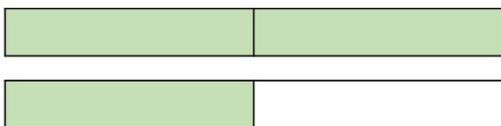Challenge – Use either grid method or column method

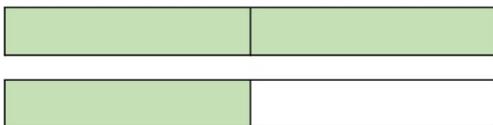5) 35 – 17 = Half of 36

6) 63 – 19 = Half of 88

7) 108 – 60 = Double 24

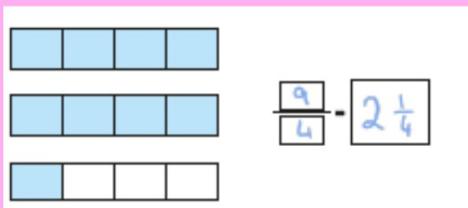8) 112 – 32 = Double 40

Recap from last week

This is an **improper** fraction.

$$\frac{3}{2}$$

An improper fraction is where the **numerator** is greater than the **denominator.**

$$\frac{3}{2} = 1\frac{1}{2}$$

This is a **mixed number.**

It is a number with a whole and a fraction.

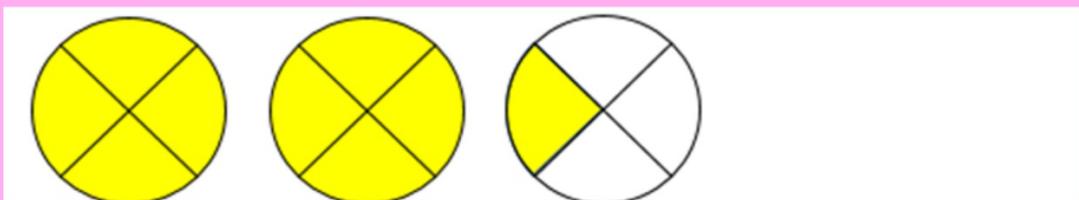Last Thursday we learnt how to convert improper fractions to mixed numbers. How can this help us with today's work?

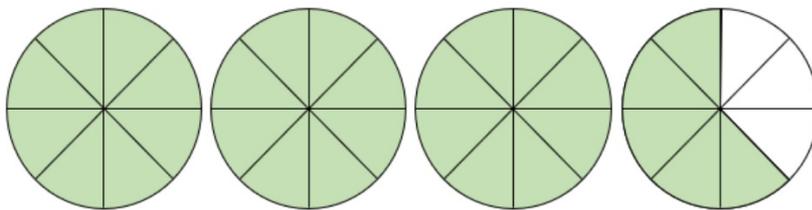$$\frac{9}{4} = 2\frac{1}{4}$$

Mixed numbers to improper fractions

1 whole and $\frac{1}{3}$ = $\frac{4}{3}$

___ whole and ___ =

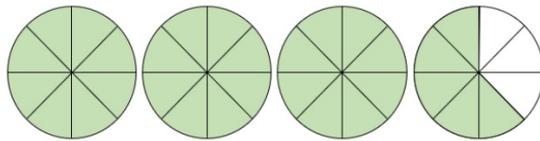Convert the mixed number to an improper fraction

$$3 \frac{5}{8} =$$

How could you use your multiplication knowledge to help you with this?

Answers

Convert the mixed number to an improper fraction

Method 1:

$$3\frac{5}{8} = \frac{8}{8} + \frac{8}{8} + \frac{8}{8} + \frac{5}{8} = \frac{29}{8}$$

Method 2:

$$3 \times 8 = 24 + 5 = \frac{29}{8}$$

Try and use your times tables knowledge to convert these mixed numbers to improper fractions.

$$2\frac{4}{5} = \qquad\qquad 10\frac{5}{6} =$$

Convert the mixed numbers to improper fractions

$$2\frac{4}{5} = \frac{14}{5}$$

$$10\frac{5}{6} = \frac{65}{6}$$
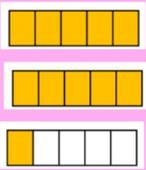
$$2 \times \frac{5}{5} = \frac{10}{5}$$

$$10 \times \frac{6}{6} = \frac{60}{6}$$

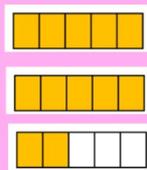$$\frac{10}{5} + \frac{4}{5}$$

$$\frac{60}{6} + \frac{5}{6}$$

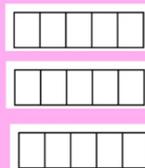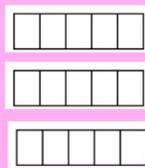## Complete the sequence below then convert the sequence into improper fractions.
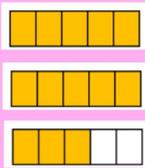
$2\frac{1}{5}$ $2\frac{2}{5}$ $2\frac{3}{5}$ ☐ ☐

$\frac{11}{5}$

1.2.21

Have a go at the questions on the sheet attached.

Reasoning challenges

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.