## Fraction Workshop 15.03.24

## Order of learning

## Key Vocabulary

Unit fraction (numerator is 1) Numerator<br>Non unit fraction (numerator Denominator<br>is more than 1)<br>Proper fraction<br>Improper fraction<br>Equivalent<br>Mixed number fractions

## Small steps



## Year 3



## Small steps

## Year 4

| Step 1 | Understand the whole | Step 9 | Equivalent fractions on a number line |
| :---: | :---: | :---: | :---: |
|  |  | Step 10 | Equivalent fraction families |
| Step 2 | Count beyond 1 |  |  |
|  |  | Step 11 | Add two or more fractions |
| Step 3 | Partition a mixed number |  |  |
|  |  | Step 12 | Add fractions and mixed numbers |
| Step 4 | Number lines with mixed numbers |  |  |
|  |  | Step 13 | Subtract two fractions |
| Step 5 | Compare and order mixed numbers | Step 14 | Subtract from whole amounts |
| Step 6 | Understand improper fractions | Step 15 | Subtract from mixed numbers |
| Step 7 | Convert mixed numbers to improper fractions |  |  |
| Step 8 | Convert improper fractions to mixed numbers |  |  |



## Year 5




## Small steps

| Step 1 | Equivalent fractions and simplifying |
| :--- | :--- |
| Step 2 | Equivalent fractions on a number line |
| Step 3 | Compare and order (denominator) |
|  |  |
| Step 4 | Compare and order (numerator) |
|  |  |
| Step 5 | Add and subtract simple fractions |
| Step 6 | Add and subtract any two fractions |
|  |  |
| Step 7 | Add mixed numbers |
|  |  |
| Step 8 | Subtract mixed numbers |

## Year 6



Equivalent Fractions

## Your go!

(e) $\overline{5}=\frac{15}{25} \quad$ (f) $\quad \frac{4}{2}=\frac{12}{21} \quad$ (g) $\quad \frac{3}{10}=\frac{1}{50} \quad$ (h) $\quad \frac{7}{8}=\frac{14}{}$

Question 1: Write down 3 different fractions that are equivalent to $\frac{1}{2}$
Question 2: Write down 3 different fractions that are equivalent to $\frac{3}{5}$

Finding fractions of amounts


## Your go!

1) $1 / 5$ of 765
2) $3 / 5$ of 765
3) $1 / 7$ of 812
4) $5 / 7$ of 812
5) $1 / 4$ of 824
6) $3 / 4$ of 824
7) $1 / 3$ of 666
8) $2 / 3$ of 666


## Adding Fractions



## Adding Fractions



## Your go!

$$
\text { 1. } \frac{2}{7}+\frac{3}{7}=[
$$

$$
\begin{aligned}
& \text { 3. } \frac{2}{9}+\frac{2}{3}= \\
& \text { 4. } \frac{9}{20}+\frac{3}{10}= \\
& \text { 5. } \frac{1}{4}+\frac{1}{2}= \\
& \text { 6. } \frac{2}{5}+\frac{5}{10}=
\end{aligned}
$$

## Subtracting Fractions



## Subtracting Fractions



## Your go!

$$
\begin{aligned}
\frac{6}{10}-\frac{1}{10}= & \frac{1}{2}-\frac{1}{4}
\end{aligned}=\square=\square \quad \frac{7}{10}-\frac{3}{5}=\square
$$

## Adding mixed number fractions



## Your go!

a) $2 \frac{1}{5}+3 \frac{3}{5}=\square$
b) $4 \frac{1}{5}+1 \frac{3}{10}=\square$

Subtracting mixed number fractions


## Your go!

## $2 \frac{3}{8}-1 \frac{1}{4}=$

b) $3 \frac{2}{3}-2 \frac{1}{6}=$
c) $4 \frac{3}{5}-3 \frac{3}{10}=$

Multiplying fractions


## Your go!

$$
\begin{aligned}
& \text { 1. } \frac{3}{4} \times 5= \\
& \text { 2. } \frac{4}{5} \times 2= \\
& \text { 3. } \frac{3}{6} \times 6=
\end{aligned}
$$

## Dividing fractions



## Your go!

1. $\frac{3}{5} \div 2$

$$
\text { 3. } \frac{3}{4} \div 6
$$

$$
\text { 5. } \frac{5}{8}
$$

## Simplifying fractions



## Mixed Numbers and Improper Fractions



## Common Misconceptions

- Not recognising a proper fraction as less than a whole
- Adding and subtracting the denominators as well as the numerators
- Not doing the same calculation to both the numerator and denominator when finding an equivalent fraction
- Leaving the denominator unchanged when multiplying fractions

Link to calculation policy on our website (as requested):

Then, scroll to the bottom of the page and you will find a folder called "Calculation Policies" that you can click on and you will be able to download them.

