Monday

Maths – Add 2 or more Fractions (page 2)

The **numerator** and **denominator** are the parts of a fraction.

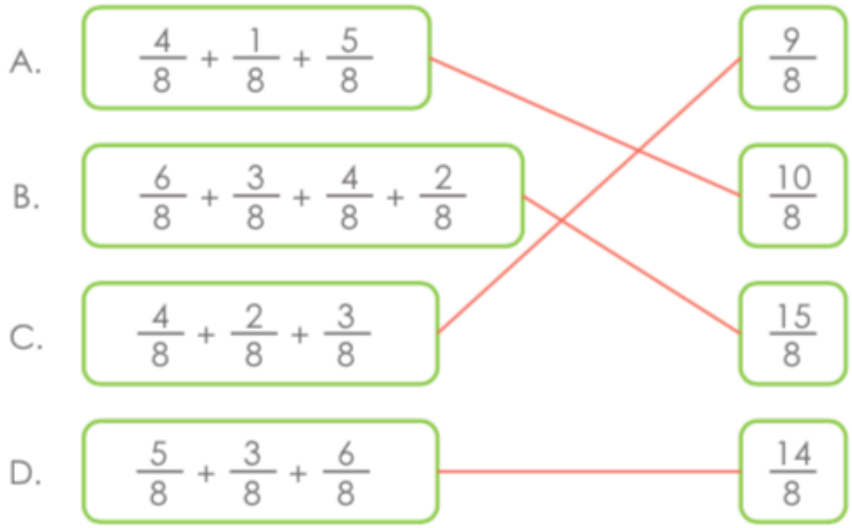
The **numerator** is the number above the line in a fraction and it indicates the number of parts out of the whole there are.

$$\frac{7}{12}$$

The **denominator** is the number below the line in a fraction and it indicate how many equal parts a whole has been divided into.

Question 1 – This question asks children to calculate the answer by adding the fractions together and matching each to the correct answers. In order to add fractions, each mus have the same **denominator**. Then you add each **numerator** together to find the total. Fo example, calculation A shows $\frac{4}{8} + \frac{1}{8} + \frac{5}{8}$. To find the total, children must add 4, 1 and 5 which total 10. This means the answer is $\frac{10}{8}$.

The correct answers are shown below.



Question 2 – This question involves addition calculations with missing digits. Children can use the number lines provided to help them to calculate the missing digits. You may need to remind children to think about the rules of adding fractions as explained in question 1.

The correct answers are:

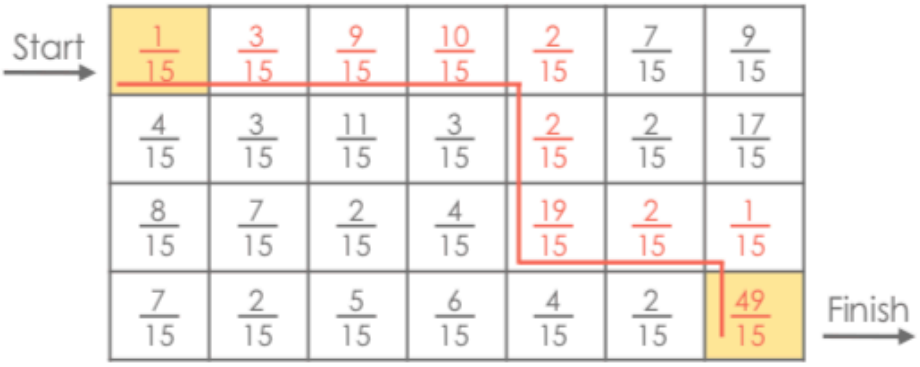
A : $\frac{5}{6} + \frac{3}{\boxed{6}} + \frac{7}{\boxed{6}} + \frac{4}{6} = \frac{\boxed{19}}{\boxed{6}}$; B : $\frac{\boxed{4}}{\boxed{9}} + \frac{2}{\boxed{9}} + \frac{11}{\boxed{9}} + \frac{6}{\boxed{9}} = \frac{23}{9}$

Monday

Maths – Recognise Tenths and Hundredths (page 2)

Question 3 – For this question, children must find a path through the maze by adding together fractions to reach the total in the finishing square. Children may need to try more than one route through the maze in order to reach the given total.

There are various routes through the maze, one example is shown below.



Tuesday

Maths – Subtract 2 Fractions and Subtract from Whole Amounts (page 4)

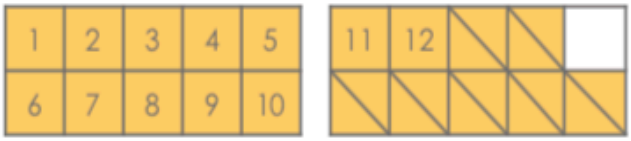
The **numerator** and **denominator** are the parts of a fraction. For a recap on these terms, see page 2.

An **improper fraction** is a fraction where the numerator is greater than the denominator, for example: $\frac{5}{4}$.

A **mixed number** is a fraction that includes the whole number and the fraction. For example: $1\ \frac{1}{4}$.

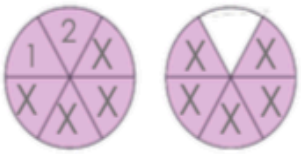
Question 1 – For this question, children must look at the images provided to help them to calculate the answer. In order to do this, children can cross out seven tenths and count how many tenths are left.

The correct answer is: $\frac{12}{10}$.



Question 2 – For this question, children must match the correct answer to the calculation by subtracting the second **numerator** from the first using the picture to help.

The correct answer is; $\frac{2}{6}$.



Question 3 – For this question, children must look at the image provided and mark the calculation which matches it. The representation shows a total of three wholes split into quarters. There are five quarters crossed out with seven quarters left. This means the correct calculation is:

B. $3 - \frac{5}{4} = \frac{7}{4}$ X

Tuesday

Maths – Subtract 2 Fractions and Subtract from Whole Amounts (page 4)

Question 4 – This question is to help children to use the numbers in the calculation to complete the subtraction. To subtract fractions, children will need to make sure the fractions have the same **denominator**. They will then need to subtract the **numerators**. For example, $2 - \frac{6}{7}$. To begin this calculation, children can change two wholes into $\frac{14}{7}$ to help make the subtraction easier. Children can then do 14 – 6 to find the answer, meaning $2 - \frac{6}{7} = \frac{8}{7} = 1\frac{1}{7}$. Children can also draw a representation as used in previous questions if needed.

The correct answer is shown below.

A. $2 - \frac{6}{7} = 2\frac{1}{7}$

B. $4 - \frac{5}{8} = 3\frac{3}{8}$

C. $\frac{18}{6} - \frac{5}{6} = \frac{13}{6}$

Question 5 – This question is more open-ended than the others. Children must use their knowledge of subtracting fractions to decide which calculation is the odd one out. Children must write a sentence to explain why they have chosen the calculation as the odd one out.

The correct answer is; A is the odd one out because it has an answer of $\frac{41}{8}$ instead of $\frac{33}{8}$.

Question 6 – For this question children must use the given **digit cards** to create a subtraction calculation and its answer.

9	6	4	13

These are the **digit cards** given in the question.

Children can use each card more than once but the calculation must be correct. Children can draw a representation to help them to calculate the answer.

There are various answers, one example is given below.

$\frac{19}{4} - \frac{13}{4} = \frac{6}{4}$

Tuesday

Maths – Subtract 2 Fractions and Subtract from Whole Amounts (page 4)

Question 7 – To solve this problem, children must decide whether or not they agree with Daisy's statement about Arfan's calculation. They must use their knowledge of subtracting fractions to decide whether they agree or disagree with the statement and then write a sentence to explain why.

The correct answer is; No, I disagree with Daisy because $\frac{36}{9} - \frac{27}{9} = \frac{9}{9}$ which is the same as 1 whole and not a fraction less than 1.

Wednesday

Maths – Fractions of a Quantity (page 6)

> < = are comparison symbols used to represent more than (**>**), less than (**<**) and equal to (**=**).

The **numerator** and **denominator** are the parts of a fraction. For a recap on these terms, see page 2.

To find a **fraction of a quantity**, you must first divide the whole number by the **denominator** to find the **unit fraction** and then multiply this answer by the **numerator** to complete the calculation. For example: to find $\frac{3}{4}$ of 24, you first complete 24 ÷ 4 which equals 6, to find $\frac{1}{4}$ of 24. To find $\frac{3}{4}$, multiply 6 x 3 which is 18 meaning $\frac{3}{4}$ of 24 = 18.

A **unit fraction** is a fraction where the numerator is 1. For example: $\frac{1}{4}$.

Question – This is an open-ended activity that will require children to use their understanding of finding **fractions of a quantity** as explained above.

To solve this problem, children will need to use the given **digit cards** (as displayed below) to complete the two calculations. Each card can only be used once to solve the problem. Children may need to use some **trial and error** to find a solution (trying various calculations and seeing their results. These results directly help in reaching the final answer).

1	2	2	3	4	4	5	6	8	8

← These are the **digit cards** given in the question.

Children will need to ensure the comparison states remain correct by calculating the fraction of the quantity for each statement.

There are various ways to complete the statements. Two examples are given below.

$\frac{5}{6}$ of 18 > $\frac{4}{4}$ of 8 | $\frac{6}{8}$ of 32 = $\frac{1}{2}$ of 48

$\frac{5}{6}$ of 18 > $\frac{4}{4}$ of 12 | $\frac{6}{8}$ of 24 = $\frac{3}{8}$ of 48

Thursday

Maths – Calculate Quantities (page 8)

A **unit fraction** is a fraction where the numerator is 1. For example: $\frac{1}{4}$.

To **calculate quantities**, you must find the whole from a given part. To do this, you must first divide the part by the **numerator** to find the value of the **unit fraction.** This number must then be multiplied by the **denominator** to find the whole. For example: if $\frac{3}{7}$ of a number is 21, you must divide 21 (the part) by 3 (the **numerator**) which equals 7. To find the whole, you multiply 7 (the **unit fraction**) by 7 (the **denominator**) which is 49. The completed calculation is written as $\frac{3}{7}$ of 49 = 21.

Trial and error is the name given to a problem-solving method which involves trying various calculations and seeing their results. These results directly help in reaching the final answer.

Question – This question is more open-ended for children to explore. Children must choose a selection of numbers to complete the fraction crossword. They must check their answers carefully as some may not work with all given fractions. You may need to encourage children to used **trial and error** to find the first number that will work to complete the crossword. Once they have found this, they will be able to work their way through the rest of the crossword. There is an explanation above to support children in **calculating quantities** when only a fraction is given.

There are various ways to solve the problem, two examples are given below.

$\frac{3}{7}$ of [1. 35] = [2. 15] = $\frac{5}{9}$ of [3. 27]

=

$\frac{3}{8}$

of

$\frac{8}{14}$ of [4. 70] = [5. 40] = $\frac{4}{11}$ of [6. 110]

$\frac{3}{7}$ of [1. 105] = [2. 45] = $\frac{5}{9}$ of [3. 81]

=

$\frac{3}{8}$

of

$\frac{8}{14}$ of [4. 210] = [5. 120] = $\frac{4}{11}$ of [6. 330]