Monday

Maths – Recognise Tenths and Hundredths (page 2)

Question 1 – This question shows three different **representations** of fractions. The first is a **hundred square**, the second a **bar model** and the third a **part-whole model**. Children must look at each representation and write the fraction being shown beneath each. Children must then identify which letter is the odd one out by using the fractions they have written to help.

A **representation** refers to a number that has been shown in different ways. This number may have been shown in numerals, words or using mathematical equipment such as Base 10 or a place value chart.

A **part-whole model** is a concept to show how numbers can be split into different parts. They can be used to represent numbers, as well as a wide variety of calculations. The concept follows the structure part + part = whole, but this may change depending on how many parts there are.

Bar models show how numbers can be split into different parts, by splitting them into bars or boxes. Bar models can be used to solve a wide variety of calculations, showing the relationship between the whole model and the parts.

A **hundred square** is a square split into 100 parts. It is often used to show the numbers from 1-100. It can also be used to show the relationship between tenths and hundredths when working on fractions.

The correct answer is A. $\frac{73}{100}$; B. $\frac{11}{100}$; C. $\frac{73}{100}$. B is the odd one out.

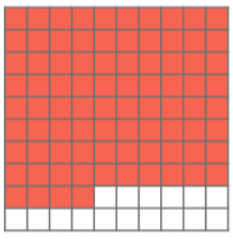
Question 2 – This question involves two blank **representations** for children to complete. The first is a **bar model**. Children need to read the clues and fill in the whole fraction on the top line and the two parts that are described in the boxes on the bottom. The smaller fraction of the two is written in the smaller box and the bigger fraction in the bigger box. The second is a **hundred square**. Children again need to read the clues below and then shade the hundred square to show this fraction.

The correct answers are shown below.

A. $\frac{46}{100}$;

$\frac{46}{100}$	
$\frac{4}{10}$	$\frac{6}{100}$

B. $\frac{84}{100}$;



Monday

Maths – Recognise Tenths and Hundredths (page 2)

Question 3 – For this question, children must use the given hundred square to decide which statement matches it correctly.

Liv is correct because she has shaded in $\frac{35}{100}$ of the whole amount. Tom is incorrect because the square represents 7 tenths and 2 hundredths.

Tuesday

Maths – Equivalent Fractions 1 (page 4)

Equivalent means equal in value. For example, equivalent fractions may use different numerators and denominators, but represent the same part of a whole.

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 indicates how many equal parts a whole has been divided into.

Question 1 – For this question, children must look at the first image and write the fraction it represents. To do this, children can count the number of shaded parts to find the **numerator** and then count how many pieces there are altogether to find the **denominator**.

For image A, 8 pieces are shaded in yellow, meaning the **numerator** is 8.

The shape has been split into 20 pieces altogether (8 shaded and 12 unshaded) making the **denominator** 20.

For the second part of the question, children must shade the blank bar so that it matched the first and the write the fraction it shows.

The correct answers are; A. $\frac{8}{20}$; B. $\frac{2}{5}$

Question 2 – For this question, children must look at the images and write the matching fractions. Once they have completed this, they must look at the three images and decide which two are **equivalent**.

The correct answers are shown below.

A.  $\frac{1}{2}$

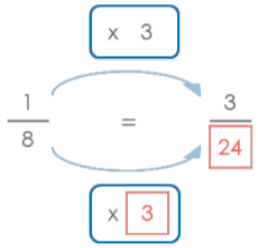
B.  $\frac{4}{8}$ $\qquad \frac{1}{2} = \frac{4}{8}$

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

Maths – Equivalent Fractions 1 (page 4)

Question 3 – This question is designed to remind children of the rule for creating equivalent fractions. To find equivalent fractions you can multiply both the **numerator** and **denominator** by the same number to create a new fraction. **Equivalent** fractions can also be found by dividing the **numerator** and **denominator** by a **common multiple** (a number that both the **numerator** and **denominator** can be divided by with no remainders).

The correct answer is shown below.



Question 4 – This question is more open-ended than the others. Children must use their multiplication facts to find an equivalent fraction to one fifth. To do this, children must multiply both the numerator and denominator by the same number and then write the new fraction. They must then complete the sentences to explain which number they have multiplied by.

For this question, there are various answers. Some examples are given below;

$\frac{2}{10}$, multiply both by 2; $\frac{3}{15}$, multiply both by 3; $\frac{7}{35}$, multiply both by 7.

Question 5 – For this question children must use the given **digit cards** to create three equivalent fractions. They can use times table and division facts to help. Children may also want to draw a representation to help them find the equivalent fractions.

The correct equivalent fractions are; $\frac{6}{9}$; $\frac{8}{12}$; $\frac{10}{15}$ or $\frac{6}{8}$; $\frac{15}{20}$; $\frac{9}{12}$

Tuesday

Maths – Equivalent Fractions 1 (page 4)

Question 6 – This question is more open ended to give the children the chance to investigate the fractions that can also be shown on the image provided.

There are various answers for this question, some examples are given below.

$\frac{24}{28} = \frac{6}{7} = \frac{12}{14}$

Question 7 – For this question, Fraser is looking at two fractions. He has made a statement about the fractions and children must decide whether this he is correct. Once they have decided whether the statement is correct, children must write a sentence explaining their choice.

There are various ways to explain this answer. Correct answers must explain that the numerator and denominator must be multiplied by the same number to find an equivalent fraction. One example is: Fraser is incorrect because the numerator and denominator need to be multiplied by 8 to be equivalent, rather than have 8 added.

Wednesday

Maths – Equivalent Fractions 2 (page 6)

Equivalent means equal in value. For example, equivalent fractions may use different numerators and denominators, but represent the same part of a whole.

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.

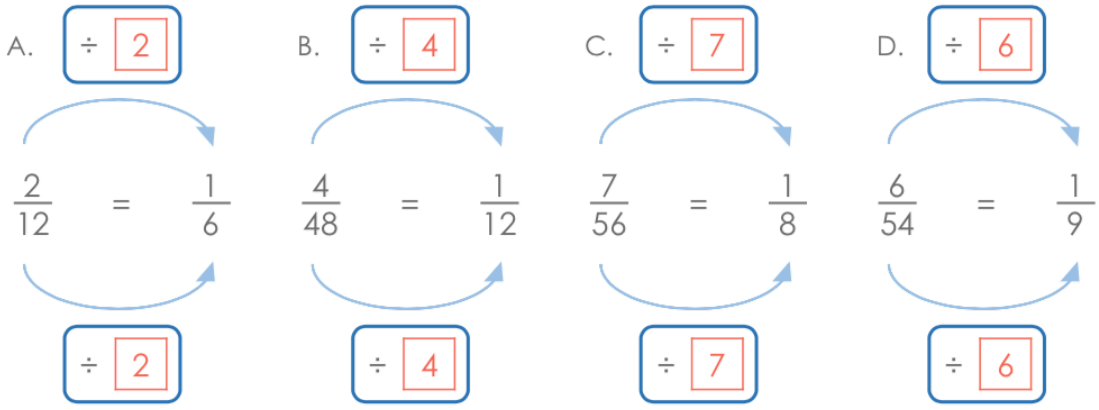
$$\frac{7}{12}$$

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

For this activity, children will be focusing on using division to find equivalent fractions.

Question 1 – For this question, children must look at the given fractions and use their knowledge of times table and division facts to help them to identify what the first **numerator** and **denominator** have been divided by to create the second fraction.

The correct answers are shown on the diagram below.



Wednesday

Maths – Equivalent Fractions 2 (page 6)

Question 3 – This question requires children to look at the working out that Robert has already done and identify the mistakes he has made. Once they have identified the mistakes, they must write a sentence to explain what they are.

The correct answer is; Robert has not divided the numerators and denominators to find the equivalent fractions; he has added on the first fraction and subtracted on the second fraction. He should have divided the numerator and denominator of the first fraction by 10 to get $\frac{1}{6}$ and divided the numerator and denominator of the second fraction by 5 to get $\frac{2}{12}$.

Wednesday

Maths – Equivalent Fractions 2 (page 6)

Question 2 – For this question, children must also use their knowledge of times table and division facts to complete the sequences of fractions. Some fractions have either the **numerator** or **denominator** given to help but there are some where the both need to be completed.

When both the **numerator** and **denominator** are missing children need to find a number that can divide both equally. It may help to write a list of all numbers that both the **numerator** and **denominator** can be divided by. For example:

18 can be divided by:
1, 2, **3**, 6, 9, 18

21 can be divided by:
1, **3**, 7, 12

$\frac{18}{21} = \frac{\square}{\square}$

Both numbers can be divided by 3 giving an equivalent fraction of: $\frac{6}{7}$

For those fractions where there is only one number to complete, children must use the fraction before to identify what it has been divided by to create the number that is given. For example:

$\frac{15}{35} = \frac{3}{\square}$

As 15 has been divide by 5, 35 must also be divided by 5. Again, children may find it useful to write out their 5 times tables up to 35:
5, 10, 15, 20, 25, 30, **35**
This shows us that 35 ÷ 5 = 7 as it is the seventh number in the list. This means the missing **denominator** is 7.

Children may find it useful to write out the 3 times table up to 15 to identify what 15 has been divided by:
3, 6, 9, 12, **15**
This shows us that 15 has been divided by 5

Children who are confident with their times table and division facts will be able to identify the missing fractions without writing out the facts and may simply complete the missing fraction boxes which are shown below.

A. $\frac{8}{32} = \frac{4}{16} = \frac{2}{8} = \frac{1}{4}$ B. $\frac{12}{84} = \frac{6}{42} = \frac{2}{14} = \frac{1}{7}$ C. $\frac{24}{36} = \frac{8}{12} = \frac{4}{6} = \frac{2}{3}$ D $\frac{54}{72} = \frac{27}{36} = \frac{9}{12} = \frac{3}{4}$

Maths – Fractions Greater than 1 (page 8)

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 indicates how many equal parts a whole has been divided into.

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 $1\frac{1}{4}$.

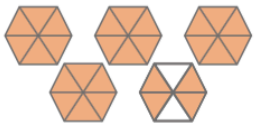
Question 1 – For this question children must match each **representation** to the correct fraction. The **representations** are different shapes split into a different number of parts with some shaded. Children must look at the shaded parts and decide which fraction greater 1 is being represented. Children may find it helpful to count the parts to help them identify the correct fraction. Two fractions are written as **mixed numbers** and one is written as an **improper fraction** as explained above.

The correct answers are; A = $2\frac{7}{8}$; B = $\frac{27}{8}$; C = $3\frac{5}{8}$

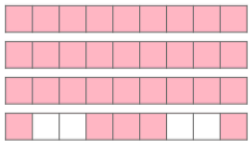
Question 2 – For this question children must complete the sentence to explain how many wholes and how many parts are in the fraction forty-two ninths. They must then circle to correct **representation** from the selection given. Children may find it helpful to identify the image before completing the statement as they can use this to help them to calculate the number of 'wholes' and the number of 'parts'.

The correct answer is; $\frac{42}{9}$ = 4 wholes and 6 ninths;

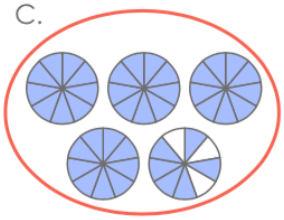
A.



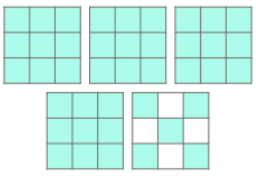
B.



C.



D.



Thursday

Maths – Fractions Greater than 1 (page 8)

Question 3 – This is an open-ended question for children to explore. Children must read the given clues and create different **improper fractions** that meet them. Children may need to take some time to explore different fractions before they find one that meets all three clues. The children can draw their own representations to help them to find the answer if they need to.

There are various answers to this question, some examples are given below;

$\frac{21}{6}, \frac{23}{6}, \frac{29}{9}, \frac{28}{9}, \frac{22}{6}$