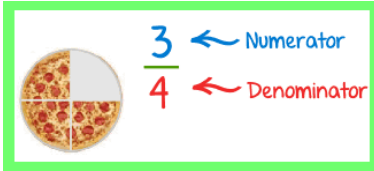# Maths Fractions

Helpful information to remind you!

Before we stopped coming to school we were learning about fractions and had begun to work out fractions of amounts.

Can you remember what a fraction is?   (A fraction is part of an amount or thing – it could be a shape or a number.)

The bottom number (denominator) tells us how many pieces, parts or groups make up the whole.

The top number (numerator) tells us how many pieces, parts or groups you want.

In the example, four pieces make up the whole pizza and there are 3 pieces left.

Can you remember what we use to help us with fractions?   (Our multiplication and division knowledge!)

If you are unable to remember how to do it, these two videos will help:

How to find a simple fraction of an amount

How to find a fraction of an amount.

If you are unable to view the videos, this is what it shows and is the same way we teach it in our maths lessons.

To find simple fractions of amounts:

½ of 20 = 20 ÷ 2 = 10
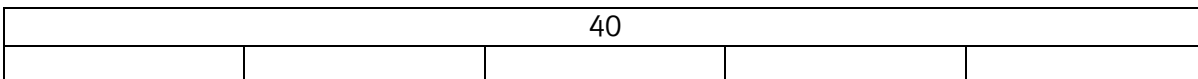
(The 20 comes from the amount and the 2 comes from the denominator in the fraction.)

REMEMBER if you ÷2 this is the same as halving:

$\frac{1}{5}$ of 40 = 40 ÷ 5 = 8

(The 40 comes from the amount and the 5 comes from the denominator in the fraction.)

We could also use the bar method:

40				

The top box is the amount 40, each box underneath is equal and is the denominator, 5. 40 ÷ 5 = 8 so each box is worth 8.

To check this we can do the inverse (opposite) 5 x 8 = 40

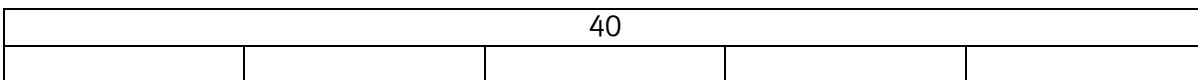To find fractions of amounts:

$\frac{3}{5}$ of 40 = 40 ÷ 5 = 8

8 x 3 = 24

$\frac{3}{5}$ of 40 = 24

(The 40 comes from the amount and the 5 comes from the denominator in the fraction.)

We could also use the bar method:

40				

The top box is the amount 40, each box underneath is equal and is the denominator, 5. 40 ÷ 5 = 8 so each box is work 8. You then need 3 boxes so multiply 8 x 3 = 24

Activity 1.

Find fractions of these amounts:

1. $\frac{1}{6}$ of 18 =   2. $\frac{2}{5}$ of 25 =   3. $\frac{3}{10}$ of 70 =   4. $\frac{4}{7}$ of 28 =

5. $\frac{3}{9}$ of 45 =   6. $\frac{5}{8}$ of 64 =   7. $\frac{6}{11}$ of 77 =   8. $\frac{2}{7}$ of 56 =

REMEMBER to use your times tables knowledge!

Activity 2

We also looked at adding and subtracting fractions with the same denominator. When the denominator is the same, it stays the same. The / symbol separates the numerator and the denominator. The first digit is the numerator.

1) 3/5 + 2/5   6) 6/7 – 2/7
2) 7/10 + 1/10   7) 8/11 + 5/11
3) 4/5 – 2/5   8) 5/9 + 2/9
4) 7/9 – 3/9   9) 4/5 – 1/5
5) 5/6 + 2/6   10) 3/10 + 4/10

Activity 2 Challenge

Are there any answers that are an improper fraction? A fraction where the numerator is bigger than the denominator? If so, convert them to a mixed number, this is whole and fractions.

$\frac{3}{5} + \frac{4}{5} = \frac{7}{5}$ There are 7 parts altogether. 5 parts make a whole meaning parts are left. Mixed number is $1\frac{2}{5}$

Activity 3

1. The answer to the question is $\frac{4}{9}$. What could the question be?
2. Would you rather have $\frac{3}{5}$ of £15 or $\frac{1}{4}$ of £32?
3. True or false? If false what is the mistake?
   - $\frac{9}{11} + \frac{7}{11} = \frac{16}{11} = 1\frac{5}{11}$

   - $\frac{2}{6} + \frac{3}{6} = \frac{5}{12}$

   - A quarter plus a quarter = a half
4. Mrs Jackson bakes a lovely chocolate cake. Mrs Scruby eats $\frac{4}{7}$ and Mr Bowman eats $\frac{2}{7}$. What fraction of the cake has been eaten **and** what fraction is left.

Activity 4

Fractions of Amounts Mazes.

Look at the attached Maze sheet. Can you find a route for the knight to reach the pot of gold?

Activity 4 Challenge

Can you design your own maze for someone in your family to work out?

Activity 5

BUZZ TIME!