

Addition - Not regrouping passing 10.

Draw both numbers into the place value chart with lines representing the tens and dots representing the ones. Add the ones column together first by counting the dots and writing the number of ones underneath. After this, do the same with the tens and write the number of tens underneath. This will give you your answer which is $30 + 6 = 36$.

$$12 + 24 =$$

T	O
	••••
	••
3	6

Addition - Regrouping passing 10.

Draw both numbers into the place value chart with lines representing the tens and dots representing the ones. Add the ones column together first by counting the dots. If there are more than 10 ones, circle the 10 ones and regroup them into the tens column to represent 1 ten. Then, continue to count the remaining ones and tens (not forgetting the regrouped 10) and write the amount underneath. $40 + 2 = 42$.

$$26 + 16 =$$

T	O
	••••••
	•••••
4	2

Subtraction - Not regrouping passing 10.

Draw the greatest number into the place value chart. Then, starting with the ones, takeaway the smallest number from the greatest (cross the ones and tens as you go). You should have the same amount of crosses as the smallest number. For example 2 crosses in the ones column and 1 in the tens column to take away 12. After this, write down the remaining tens and ones to get your answer.

$$36 - 12$$

T	O
	••••
	••
2	4

Subtraction - Regrouping passing 10.

Draw the greatest number into the place value chart. Then, starting with the ones, takeaway the smallest number from the greatest (cross the ones and tens as you go). If there are too many ones to take away, regroup 1 ten to into the ones column and write it as 10 ones. Continue to take away your tens and ones (do not count the regrouped 10) and write down the remaining tens and ones to get your answer.

$$52 - 37 =$$

T	O
	••
	•••••
1	5

Multiplication.

The first number in our multiplication tells us how many groups we need to draw. The second number tells the amount in each group. Draw the number of groups and the correct amount in each group then add them together.

In year 2 we only look at our 2, 5 and 10 timetables so this method can be used either using dot or numbers on the circles to begin counting in these intervals. For example, 10, 20, 30, 40.

Amount
of groups.

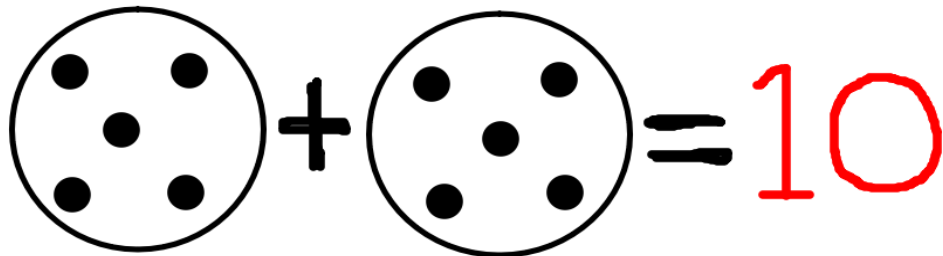
2

x

Amount
in each group.

5

=



Division

The first number is the amount which is needed to be shared equally between the amount of groups. The amount of groups needed is indicated by the second number. Draw one dot in each group (sharing equally) until you reach the amount needed to be shared. Look at the groups and the amount in one of the groups would be your answer. If you are unsure, check all of the groups to ensure they have the same amount in.

Amount shared
equally between
the groups.

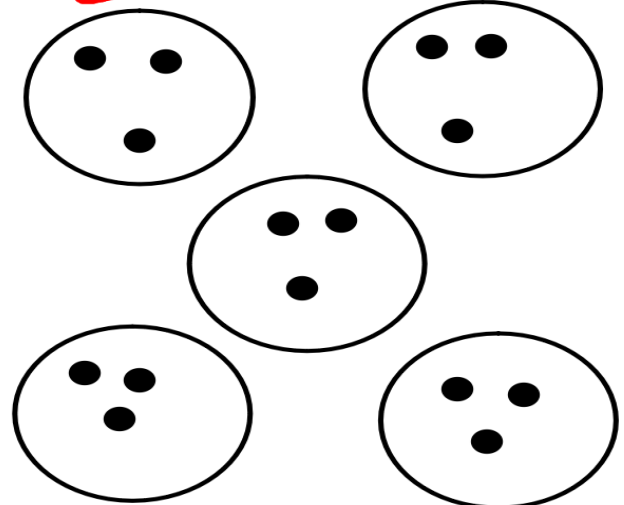
15

÷

Amount
of groups.

5

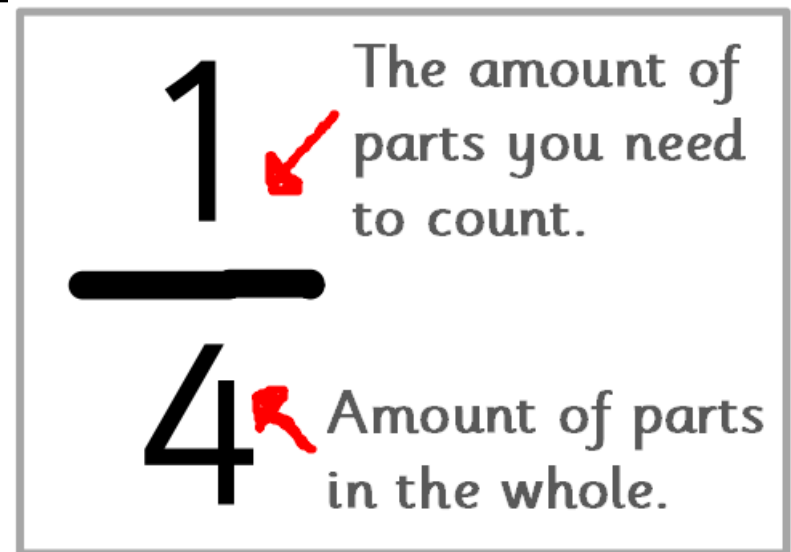
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Fractions.

The top number (numerator) tells us how many parts you have (need to count) and the bottom number (denominator) tells us how many parts make the whole. The denominator tells us how many groups we need to draw and share the number equally between.

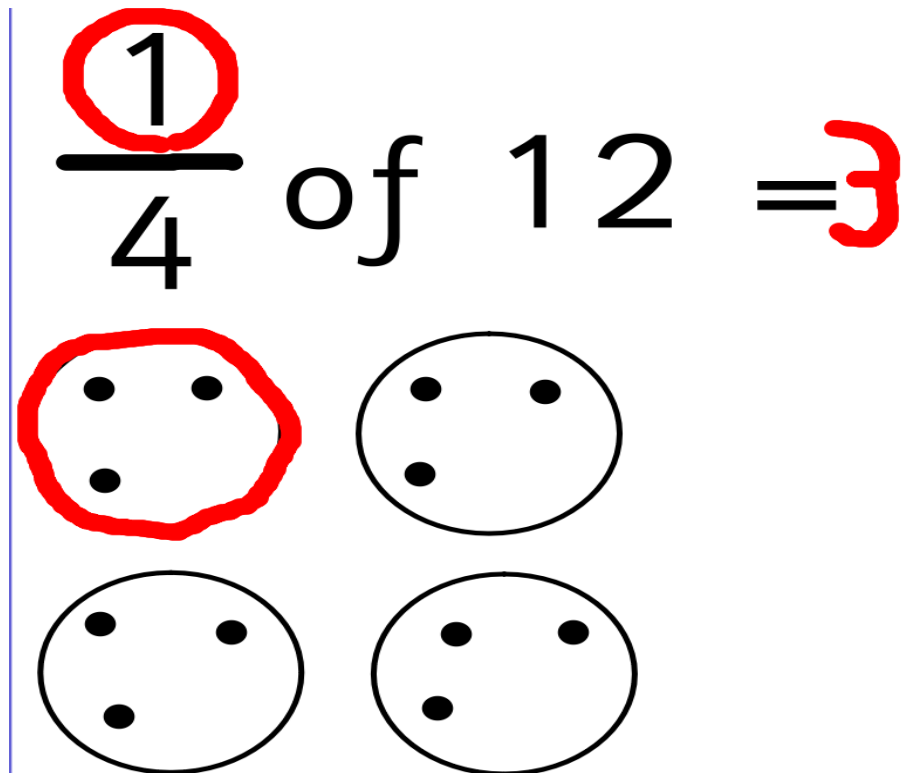
For example, $\frac{1}{4}$ of 12 would need to be shared between 4 groups equally and 1 group would need to be counted to find the quarter.



$\frac{1}{4}$

The amount of parts you need to count.

Amount of parts in the whole.



$\frac{1}{4}$ of 12 = 3

Four circles, each containing three dots, representing 12 items. The top-left circle is circled in red, representing 1 group of 3 items.