Simple Ratios

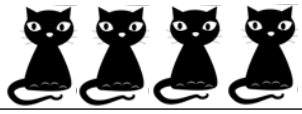
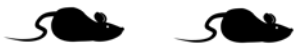
Ratios are used as an easy way to compare amounts of things.

For example, if you have 2 bananas and 3 apples you might say *"I have 2 bananas for every 3 apples"* but if you were to write this down as a ratio it would look like this **2 bananas:3 apples** or more simply just **2:3**

When we say a ratio we say *"to"* whenever we see the double dots between the numbers so when we see **2:3** we actually say *"2 to 3"*. Here are some more ratios to practice saying correctly .....

1:5 say *"1 to 5"* **3:9** say *"3 to 9"* **2:7** say *"2 to 7"* **10:15** say *"10 to 15"*

Now try to complete the following table (the first one is done for you).

		3 cats : 4 mice	3 : 4
		..... cats : ..... mice	..... : .....
		..... cats : ..... mice	..... : .....
		..... cats : ..... mice	..... : .....
		..... cat : ..... mice	..... : .....

Fill in the table below with your own examples of ratios.

		..... :	..... : .....
		..... :	..... : .....
		..... :	..... : .....
		..... :	..... : .....

Now move on to the next sheet .....

Simple Ratios

Now that you have a good understanding of ratios it's time to make things a little more complicated! So far we have been comparing one amount with another amount but in the world of maths it's common to make numbers as small as possible to make them easier to work with.

Let's look at the ratio **2:6**. One way to make both of the numbers smaller is to divide them both by 2 (also called halving) like this ....

2÷2=**1** and 6÷2=**3** so we can simplify **2:6** down to **1:3**

Let's use 2 rabbits called Pip and Bob with 6 carrots to test our simplifying.

2 rabbits:6 carrots

2:6

If we simplify the ratio **2:6** by halving each of the numbers we get **1:3** which tells us that for every **one rabbit** there are **three carrots** .....

..... and that's correct! There is 1 rabbit to every 3 carrots.

What just happened?!? Is that OK?!?

Can we just change the numbers in a ratio however we like?

No we can't. Whenever we simplify ratios we must always divide both sides of the ratio by the same number.

We'll practice doing that on the next sheet .....

Simple Ratios

It's now time to have a go at simplifying some ratios so we can practice everything that we learned on the previous sheets.

REMEMBER

We must always divide both sides of the ratio by the same number.

Work from left to right on each line of the table below to simplify all of the ratios. The first one has been done for you.

4:6 →	Divide both sides by 2 →	**4** ÷ 2 = 2 **6** ÷ 2 = 3 →	**2:3**
3:9	Divide both sides by 3	..... ÷ 3 = ... ÷ 3 = ...	:
4:8	Divide both sides by 4	..... ÷ 4 = ... ÷ 4 = ...	:
2:10	Divide both sides by 2	..... ÷ 2 = ... ÷ 2 = ...	:
6:9	Divide both sides by 3	..... ÷ 3 = ... ÷ 3 = ...	:
4:12	Divide both sides by 4	..... ÷ 4 = ... ÷ 4 = ...	:
5:20	Divide both sides by 5	..... ÷ 5 = ... ÷ 5 = ...	: