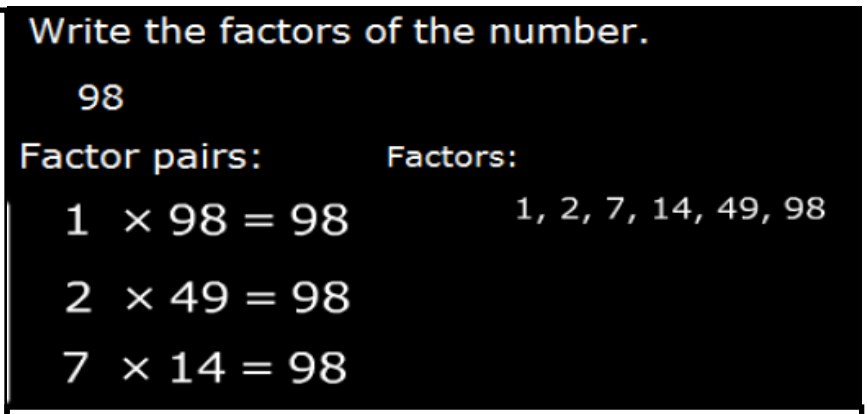
Maths Prompts: 4th – 15th May 2020

Factors:

Factors are numbers that you multiply together to get a number

e.g. 2 x 3 = 6, so 2 and 3 are factors of 6. (We call these a factor pair – the two numbers that go together)

To find all the factor pairs, we need to find all the numbers that multiply together to get the number.



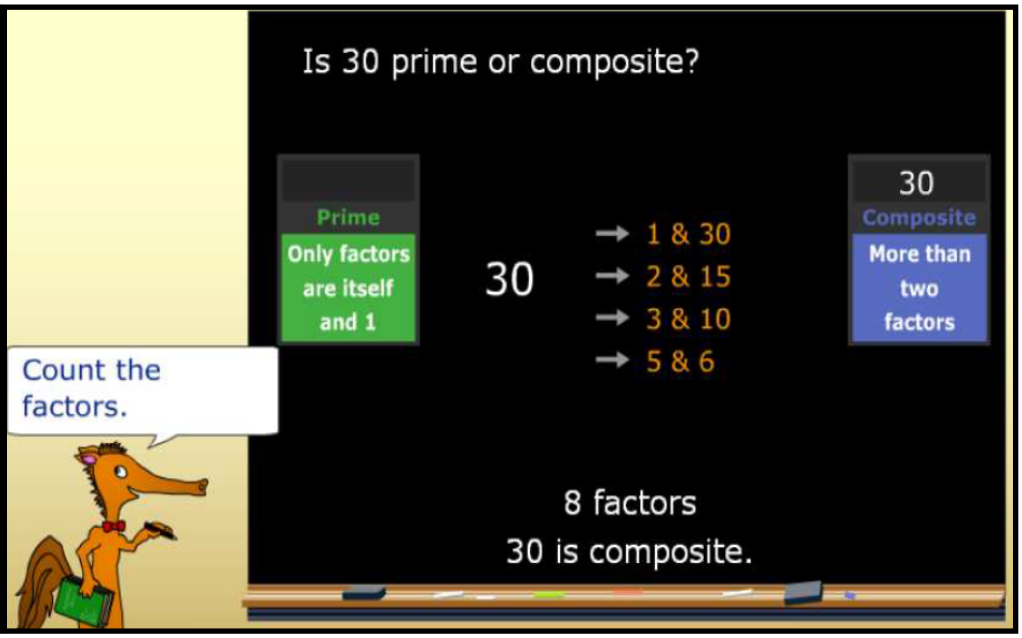
Your times tables will help you to find all the factors of a number, especially if you know the related division facts too.

Prime Numbers & Composite Numbers:

A Prime Number can only be divided equally by itself and the number 1, so that means they only have two factors.

Composite numbers have more than two factors.

TOP TIP: all even numbers can be divided by 2, so 2 is the only even prime number!



Squared Numbers & Square Roots:

When you square a number you times it by itself – remember, this is shown by the small two after it e.g.

$11^2 =$ 11 x 11 = 121

To find the square root, you work out which number had been squared to get the total inside the tick e.g.

$\sqrt{121} = 11$

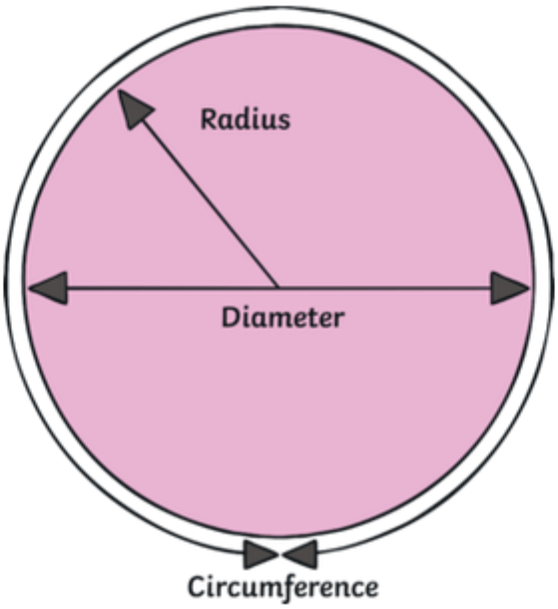
$\sqrt{1}$	1
$\sqrt{4}$	2
$\sqrt{9}$	3
$\sqrt{16}$	4
$\sqrt{25}$	5
$\sqrt{36}$	6
$\sqrt{49}$	7
$\sqrt{64}$	8
$\sqrt{81}$	9
$\sqrt{100}$	10
$\sqrt{121}$	11
$\sqrt{144}$	12

REMEMBER!

Knowing your times tables will also help you to work out whether a number is prime or composite and to know the answer to squared and square root problems instantly.

Make sure you practise them every day, and the related division facts too!

Statistics Prompts...



Parts of a circle:

Why not try the challenges on this video clip?

https://www.youtube.com/watch?v=5Ni53wpVO2I

Mean, Mode, Median & Range:

A useful video clip to re-cap on these– https://www.youtube.com/watch?v=dkl-3iztY5o

Median (Middle)

The number which is in the middle or the middle value.

11 7 11 18 9 7 6 23 7

6 7 7 7 9 11 11 18 23

Median: 9

Mode (Most)

The number that appears the most.

11 7 11 18 9 7 6 23 7

6 7 7 7 9 11 11 18 23

Mode: 7

Mean (Average)

The total of the numbers divided by how many numbers there are.

11 7 11 18 9 7 6 23 7

11+7+11+18+9+7+6+23+7=99

99 / 9 = 11

Mean: 11

Range (Difference)

The difference between the largest and the smallest number.

11 7 11 18 9 7 6 23 7

Large : 23 Small : 6

23 - 6 = 17

Range: 17

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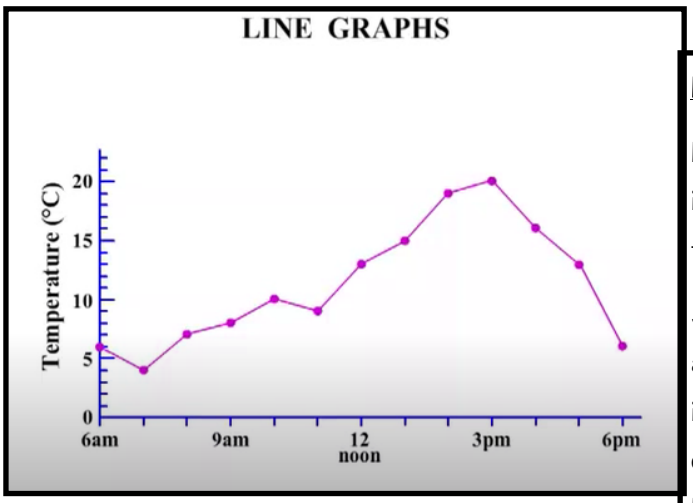


Line Graphs:

Line graphs are used to record continuous data; this is usually measuring one thing that changes over time or distance.

Just like any other graph it has an x-axis and a y-axis, the labelled axis help us to interpret (read) the information presented on the graph and answer questions about it. This video link will remind you how to read this type of graph:

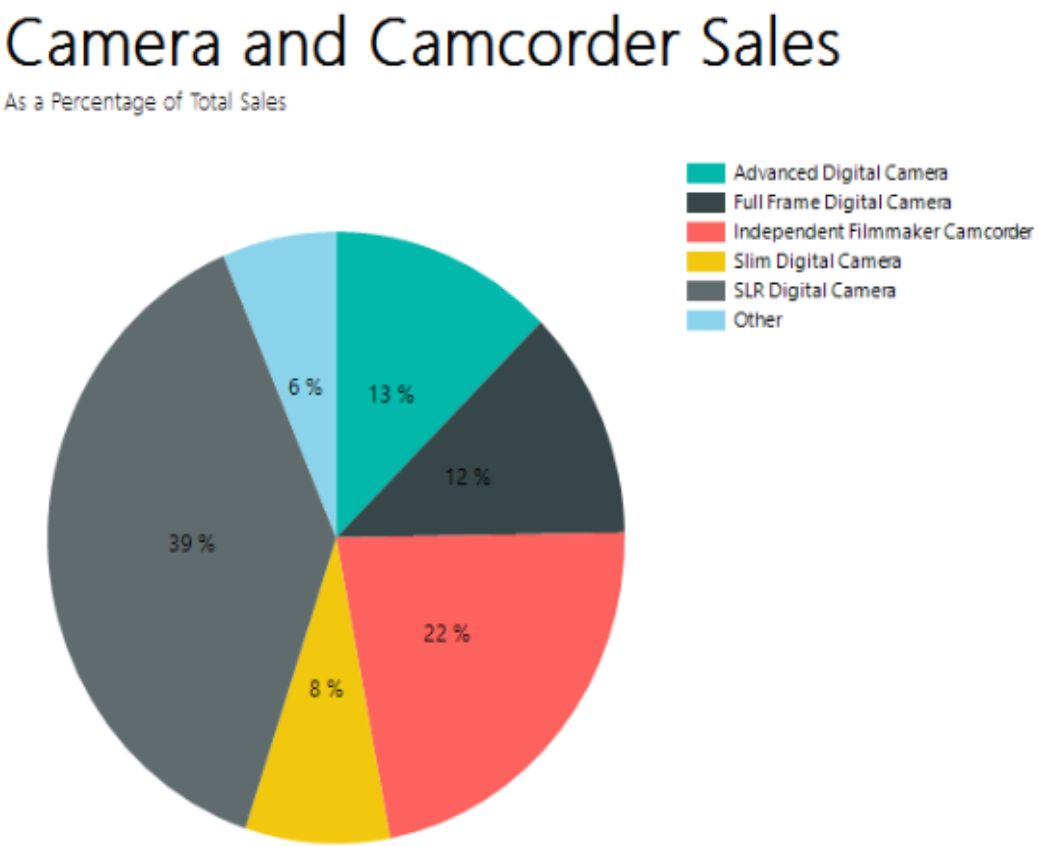
https://www.youtube.com/watch?v=x9dfsti25HY

Pie Charts:

Pie Charts are used to record discrete data; this separate data measure a one point. The information is presented as coloured segments of a circle (they look like slices of a pie– hence the name!). In order to interpret the information you need a key and often percentages are shown. Basic questions can be answered by simply looking at the coloured segments and referring to the key provided.

However, as pie charts are often shown in percentages, sometime you will need to calculate a % of an amount to answer the question

e.g. If 50 people were asked their favourite flavour ice cream and 20% of them preferred chocolate, you may be asked "How **many** people preferred chocolate ice-cream?" – you would need to work out 20% of 50 to answer the question.



What is a percentage?

per cent % = per hundred

A percentage is a fraction of an amount out of 100.

6/10 = 60/100 = 60%

A simple re-cap on calculating percentage or an amount:

https://www.bbc.co.uk/bitesize/topics/znjqtfr/articles/zcfyw6f

Or more challenging:

https://www.youtube.com/watch?v=rR95CbcjzusI