

Week 1 - Times Tables

$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

$$8 \times 5 = 40$$

$$8 \times 6 = 48$$

$$8 \times 7 = 56$$

$$8 \times 8 = 64$$

$$8 \times 9 = 72$$

$$8 \times 10 = 80$$

$$8 \times 11 = 88$$

$$8 \times 12 = 96$$

Week 2 - Integer place value & Rounding

Digit is one of the symbols from 0,1,2,3,4,5,6,7,8,9.

Integers are whole numbers, e.g. 4, 270, -6. They are not decimals or fractions.

Place Value is the value of the digit that is related to it's position on a number line.

Place Holder The zero number is used as a place holder to show that a place value is zero. E.g. 502 without a place holder to show there are no tens would be mistaken for 52.

Billion = 1 000 000 000

Intervals are **spaces** on a number line which are split through **equal division**.

Round is when we write a number to a required degree of accuracy e.g. 543 rounded to the nearest 10 is 540. The **convention** in Maths is to round up if we are **halfway** e.g. 25 to the nearest 10 is 30 because 25 is halfway between 20 and 30.

Convention means a way in which something is usually done.

Week 4 - Standard Form

One significant figure means just one leading digit for a number. Leading zero's are not significant.

10^5 means 10 to the **power** 5 which is $10 \times 10 \times 10 \times 10 \times 10$. The 5 is called in the **index**.

Standard form is a way of writing numbers so that they are between 1 and 10 and multiplied by a power of 10 e.g. 8000 is 8×10^3

Scientific Notation is another word for Standard form. Standard form is used in science to express very large or very small numbers e.g. distance from Earth to Sun is 1.5×10^8 km

Week 5 - FDP conversion

Tenth = $\frac{1}{10}$

Hundredth = $\frac{1}{100}$

Fifth = $\frac{1}{5}$

Quarter = $\frac{1}{4}$

Eighth = $\frac{1}{8}$

Percent is a fraction out of a hundred e.g. 15% is $\frac{15}{100}$

Equivalent means the same value e.g. $\frac{1}{4} = \frac{2}{8}$

Convert means to change from one quantity to another, e.g. convert fractions to percentages.

Week 3 - Inequality and Median

Approximate is a number that is not exact but close to the actual number for it to be useful

= Equal

≠ Not equal

> Greater than

= Greater than or equal to

< Less than

= Less than or equal to

Leading digit is the first digit in a number e.g. the number 3042 has the leading digit of 3.

One significant figure means have just one leading digit for a number. Leading zero's are not significant.

Ascending is when you order numbers from smallest to largest.

Descending is when you order numbers from largest to smallest.

Difference is the result of subtracting one number from another e.g. the difference between 8 and 17 is 9 ($17-8=9$).

Greatest number is the largest number.

Least number is smallest number.

Range is difference between the largest and smallest values.

Median is the middle number when all the numbers are arranged in ascending order.

Median is an example of an **average**.

Week 6 - Fractions

The **numerator** is the top number in a fraction. It tells us how many parts we have.

The **denominator** is the bottom number in a fraction. It shows how many parts the item has been split into.

$$\frac{3}{5}$$

← numerator
← denominator

Dividend is the number that is being divided.

Divisor is the number that you are dividing by.

Quotient is the result of a division.

$$4 \overline{) 24}$$

6 ← quotient
24 ← dividend
↑
4 ← divisor

Improper fractions have a numerator greater than the denominator.

Mixed fractions contain a whole number and a fraction.

$$2 \frac{1}{2} \rightarrow \frac{5}{2}$$

Mixed fraction Improper fraction