Multiplication and Division

Key Vocabulary

Commutative— Com/mu/ta/tive — A calculation that gives the same answer in either order

Quotient — Qu/o/ti/ent— The answer when one number is divided by another

Integer— In/te/ger—A whole number

Lowest Common Multiple—The first multiple of two or more numbers that appear for both

Highest Common Factor— The largest number that will divide exactly into two or more other numbers

Divisor— Di/vis/or—A number that another number is divided by

Dividend— Div/id/end—The number which is to be divided

Mean— M/ean—When you share out the total of some numbers between how many there are

Median— Med/i/an—The middle number of a set of values when they are in order

Range—R/ange—The highest value subtracted from the lowest value

Perpendicular— Per/pen/dic/u/lar—Two lines that are at 90° to each other

Metric Conversions

1 centimetre = 10 millimetres

1 metre = 100 centimetres

1 kilometre = 100 metres

1 litre = 1000 millilitre

1 centilitre = 10 millilitre

1 kilogram = 1000 grams

Order of Operations

BIDMAS

Brackets, Indices, Divide, Multiple, Add, Subtract

$4 + 3^2 \times 5$

Step 1

$4 + 9 \times 5$ (Indices)

Step 2

$4 + 45$ (Multiplication)

Step 3

49 (Add)

Averages and Spread

Mean

2, 7, 3

Total = 2+ 7 + 3 = 12

12 ÷ 3 = 4

Median

5, 7, **9**, 11, 13

4, 6, 7, 12

6.5

If you have an even number of values, find the value that would lie between the two middle values.

Range 3, 5, 7, 9

9—3 = 6

Multiplying by a decimal

$60 \times 0.1 = 60 \times \frac{1}{10} = 6$

$\times$ by $\frac{1}{10}$ *is the same as* $\div$ by 10