

KEY DECLARATIVE FACTS IN MATHS



These key facts are introduced and directly taught in maths lessons. They are taught in a number of ways: in specific declarative Power Maths lessons, within Mastering Number sessions or during Times Table time. It is crucial that these declarative facts are taught and embedded in order for children to have success in future Procedural and Conditional knowledge lessons. The aim is for these facts to be known without hesitation and that all children can instantly recall them.

These key facts are regularly revisited and reinforced via 'My turn, your turn' sentence stems within lessons and in Flashbacks in subsequent lessons. Declarative facts from previous year groups are included and continuously re-visited to reduce the 'forgetting curve' effect. Automaticity in knowing these facts is the aim.

RECEPTION

<b>Key concept/knowledge</b>
Count to 5
Subitise numbers to 5
Recall 1 more/1 less than numbers up to 5
Number bonds to 5
Count to 10
Recall 1 more/1 less than numbers up to 10
Number bonds to 10
Count to 20 and beyond (verbally)
Doubles to 5+5

YEAR 1

<b>Key concept/knowledge</b>	<b>Area of learning</b>
To count on and back from any number to 100	Number
1 more and 1 less than numbers to 100	Number
Can count in ordinal numbers, 1 <sup>st</sup> , 2 <sup>nd</sup> etc	Measure
Addition and subtraction facts within 10 (Number bonds for each number to 10 and the related subtraction facts)	Addition and subtraction
I know the name of a circle, square, rectangle, circle	Shape
I know the name of a cone, cube, cylinder, cuboid, sphere, pyramid	Shape
To count in tens to 100	Number
Count in 2s on and back to 20	Number
Count in 5s on and back to 50	Number
Identify odd and even numbers	Number
Halves and doubles up to 10+10 and $\frac{1}{2}$ of 10	Multiplication and Division
A half is one of two equal parts. Half of ... is ....	Fractions
A quarter is one of four equal parts	Fractions
Name of days of the week	Time
1 week = 7 days	Time
1 school week = 5 days	Time
Name of months of the year	Measure
Can read o'clock times	Measure
Can read half past times	Measure
2p = 2 one pence coins 5 p = 5 one pence coins 10p = 10 one pence coins 20p = 20 one pence coins 50p = 50 once pence coins £1 = 100 once pence coins Five £1 coins = £5 note Ten £1 coins = £10 note Two £5 notes = £10 note	Measure

YEAR 2

<b>Key concept/knowledge</b>	<b>Area of learning</b>
To know number bonds of multiples of 10 up to 100 Eg. $20+80 = 100$	Number
Addition and subtraction facts within 20 (Number bonds for each number to 20 and the related subtraction facts)	Addition and subtraction
Doubles and halves of numbers to 20	Addition and subtraction
To know 10 more and 10 less than numbers to 100	Addition and subtraction
Multiplication and division facts for the 2,5 and 10 times tables (fact families)	Multiplication and division
To be able to name <b>multiples</b> of 2, 5 and 10	Multiplication and division
1 metre = 100 cm	Measure
A square has 4 sides and 4 <b>vertices</b> A rectangle has 4 sides and 4 vertices A triangle has 3 sides and 3 vertices A circle has 1 side and no vertices A pentagon has 5 sides and 5 vertices A hexagon had 6 sides and 6 vertices	Shape
A third is one of three equal parts	Fractions
Read quarter to and quarter past times	Measure
60 minutes = 1 hour 30 minutes = half an hour	Measure
1 day = 24 hours	Measure
1000g = 1 kg	Measure
1000ml = 1 litre	Measure

YEAR 3

<b>Key concept/knowledge</b>	<b>Area of learning</b>
Ten tens = one hundred	Place Value
100 ones = 100	Place Value
I know by heart all number bonds that total 100 eg. $21 + 79 = 100$	Addition and subtraction
To know by heart all sums and differences of multiples of 10 up to 100 eg. $60+30 =90$ $90-60=30$	Addition and subtraction
I know 100 more and 100 less than numbers to 1000	Addition and subtraction
I know doubles and halves of any two digit number to 50	Addition and subtraction
Multiplication and division facts for the 3,4,8 times tables (fact families)	Multiplication and division
Can name <b>multiples of 3,4,8.</b>	Multiplication and division
Can name <b>products</b> of $a \times b$ (linked to times tables above)	Multiplication and Division
10 mm = 1 cm	Measure
A tenth is one of ten equal parts	Fractions
$\frac{1}{2}$ is greater than $\frac{1}{4}$ $\frac{1}{4}$ is less than $\frac{1}{2}$	Fractions
$\frac{2}{4}$ is equivalent to $\frac{1}{2}$	Fractions
24 hour times	Measure
1 year = 365 days (366 days in a leap year)	Measure
1 year = 12 months	Measure
(month) has (number of days) days	Measure
1 year = 52 weeks	Measure
1 minute = 60 seconds	Measure
A right angle is a quarter turn An angle less than a right angle is an acute angle An angle greater than a right angle but less than a straight line is an obtuse angle	Shape
A prism is the same shape all the way through	Shape

YEAR 4

<b>Key concept/knowledge</b>	<b>Area of learning</b>
Ten hundreds = one thousand	Place Value
One hundred tens = one thousand	Place Value
One thousand ones = one thousand	Place Value
Recall Roman Numerals up to C: I One V Five X Ten L 50 C 100	Number
Any number $\times 0 = 0$	Multiplication and division
Any number $\times 1 =$ the same number	Multiplication and division
Any number $\times 10$	Multiplication and Division
Any number $\times 100$	Multiplication and Division
Any number divided by 10	Multiplication and Division
Any number divided by 100	Multiplication and Division
Any number divided by 1 = the same number	Multiplication and Division
Factors and factor pairs up to $12 \times 12$	Multiplication and Division
6,7,9,11 and 12 times table facts and related division facts All multiples up to $12 \times 12$	Multiplication and Division
1km = 1000 m	Measure
A hundredth is one of one hundred equal parts	Fractions and decimals
$\frac{1}{10} = \frac{10}{100}$ $\frac{2}{10} = \frac{20}{100}$ $\frac{3}{10} = \frac{30}{100}$ etc	Fractions and decimals
Writing tenths as decimals $\frac{1}{10} = 0.1$ $\frac{2}{10} = 0.2$ etc	Fractions and decimals
Writing hundredths as decimals eg. $\frac{15}{100} = 0.15$	Fractions and decimals
$\frac{1}{4} = 0.25$ $\frac{1}{2} = 0.5$ $\frac{3}{4} = 0.75$	Fractions and decimals
An acute angle = $90^\circ$ A straight line = $180^\circ$ Three right angles = three quarters of a turn = $270^\circ$ Four right angles = 1 whole turn = $360^\circ$	Shape
I know the properties of an equilateral triangle, an isosceles triangle, a right angle triangle and a scalene triangle	Shape
A quadrilateral has four sides and four vertices	Shape
I can name a trapezium, rhombus and parallelogram	Shape

YEAR 5

<b>Key concept/knowledge</b>	<b>Area of learning</b>
Ten one thousands = ten thousand	Place Value
One hundred hundreds = ten thousand	Place Value
10 ten thousands = one hundred thousand	Place Value
Recall Roman Numerals up to M I One V Five X Ten L 50 C 100 D 500 M 1000	Number
100 one thousands = one hundred thousand	Place Value
Ten hundred thousands = one million	Place Value
One hundred tens of thousands = one million	Place Value
Add and subtract 1000 from any number	Addition and subtraction
Add and subtract 10,000 from any number	Addition and subtraction
Add and subtract 100,000 from any number	Addition and subtraction
Any number x 1000	Multiplication and Division
Any number divided by 1000	Multiplication and Division
Square numbers to 12 x 12 (144)	Multiplication and Division
Square roots of numbers up to 12 x 12	Multiplication and division
Cube numbers up to 125	Multiplication and Division
Factors and factor pairs of numbers (up to 12 x 12)	Multiplication and Division
To name prime numbers up to 50	Multiplication and Division
A thousandth is one of one thousand equal parts	Fractions and decimals
Thousandth fractions as decimals eg $15/1000 = 0.015$	Fractions and decimals
Recall percentage and decimal equivalents of $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{5}$ , $\frac{2}{5}$ and $\frac{4}{5}$	Fractions and decimals
A whole turn = $360^\circ$	Shape
1000grams = 1 kg	Measure
1 inch = 2.5 cm	Measure
1 kg = 2 pounds	Measure
1 year = 365 days	Measure

YEAR 6

<b>Key concept/knowledge</b>	<b>Area of learning</b>
One thousand thousands = one million	Place Value
Lowest common multiples	Multiplication and Division
Common factors and highest common factors	Multiplication and Division
To know prime numbers to 100	Multiplication and Division
Fractions as a decimal and percentage equivalent 1 whole = 1 = 100% $1/100 = 1\%$ $2/100 = 2\%$ $1/10 = 0.1 = 10\%$ $2/10 = 0.2 = 20\%$ $1/2 = 0.5 = 50\%$ $1/4 = 0.25 = 25\%$ $3/4 = 0.75 = 75\%$ $1/3 = 33\%$ $1/8 = 0.125 = 12.5\%$	Fractions and decimals
Conversions between metric and imperial units: 5 miles = 8km	Measure
The internal angles of a triangle always add up to $180^\circ$	Shape
The internal angles of quadrilaterals always add up to $360^\circ$	Shape
Recall the names of parts of a circle: radius, diameter and circumference	Shape