

# Parent Information - Maths Facts Booklet

## Year Five

Each year group has an individual maths booklet and is stuck in the back of Spelling Books. The Maths Planet Booklets are pitched in line with year group expectations. They contain the maths facts from the National Curriculum and these will be taught during the year in Maths. They are designed to support parents to reinforce this learning outside school. The children need to be very secure in their knowledge and ability to recall (quickly) in order to 'achieve' each objective.

Teachers will indicate in the Maths Planet Booklet which facts need to be practised at home. Children need to show that the learning has been embedded. Once you feel your child is confident with the fact put a date in the 'Home' column. The dates in the 'Home' column must be at least two weeks apart to show they have practiced over a period of time. In Years 4, 5 and 6, the 'Me' column is for the child to sign once they feel confident they know the fact. When a fact is tested in school, the teacher will either put a sticker on the 'star' on the front cover or date the completed fact to show your child has been tested and has been successful. **This can only be done in school!**






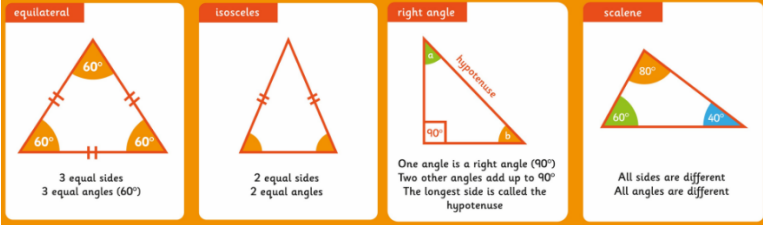
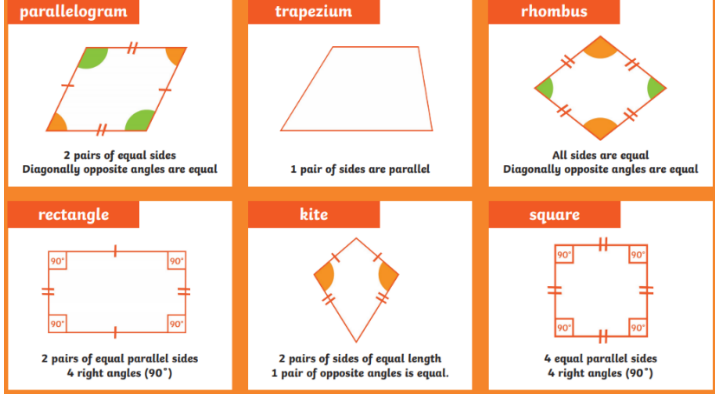
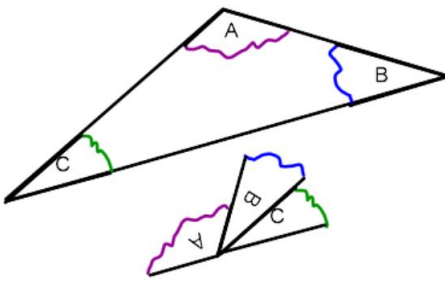


Multiplication Tables	Further explanation / Ideas of how to practise
	Speed grid multiplication tables. Trying to beat time. Grid size increases with once 2mins is reached.

Place Value	Further explanation / Ideas of how to practise
Read and write numbers to at least 1 000 000 and say the value of each digit.	Identify ones, tens, hundreds, thousands, tens of thousands etc. 13, 123 has 3 thousands
Order and compare numbers to at least 1 000 000	Write a set of numbers up to 1 million – order the numbers
Count forwards and backwards in steps of 10 for any given number up to 1 000 000.	345, 355, 365, 375... 12345, 12355, 12365, 12375... 99999, 99989, 99979, 99969...
Read and write Roman numerals up to 1000.	I = 1   V = 5   X = 10   L = 50   C = 100   D = 500   M = 1000 so 47 = XXXXVII   89 = LXXXIX   90 = XC
Read and write dates using Roman numerals	e.g. 1995 = 1000 + 900 + 90 + 5 1000 = M 900 = CM 90 = XC 5 = V  1995 = MCMXCV

<b>Multiplication &amp; Division</b>	<b>Further explanation / Ideas of how to practise</b>
Multiply and divide numbers by 10, 100 or 1000.	e.g. $24 \times 1000 = 24,000$ $1.3 \times 100 = 130$ $53 \div 1000 = 0.053$ $3.4 \div 100 = 0.034$
Know by heart all the squares of numbers between 1 and 12.	e.g. $1 \times 1 = 1$ , $4 \times 4 = 16$ , $6 \times 6 = 36$
Recognise and use cube numbers and notation.	e.g. $3 \times 3 \times 3 = 27$ or $3^3 = 27$ , $5 \times 5 \times 5 = 125$ or $5^3 = 125$
Recall prime numbers up to 19.	2, 3, 5, 7, 11, 13, 17, 19 Numbers that only have 1 x themselves as factors.
Find all factor pairs.	This means pairs of numbers that when multiplied make the same total. e.g. to make 20: $1 \times 20$ , $2 \times 10$ , $5 \times 4$

<b>Fractions and Decimals</b>	<b>Further explanation / Ideas of how to practise</b>
Know that 10 tenths are equivalent to 1/ Know that 1 is 10 times the size of 0.1	"10 tenths is equal to 1 one." "1 is 10 times the size of one-tenth." "One-tenth is 10 times the size of one-hundredth."
Know that 100 hundredths are equivalent to 1 one / Know that 1 is 100 times the size of 0.01	"1 is 100 times the size of one-hundredth." "100 hundredths is equal to 1 one."
Know that 10 hundredths are equivalent to 1 tenth/ Know that 0.1 is 10 times the size of 0.01	"10 hundredths is equal to 1 tenth."
Count using simple fractions and decimals forwards and backwards bridging zero.	$3, 2 \frac{1}{2}, 2, 1 \frac{1}{2}, 1, \frac{1}{2}, 0$ $0.5, 0.4, 0.3, 0.2, 0.1, 0, -0.1, -0.2, -0.3$
Compare numbers with the same numbers of decimal places (up to two decimal places).	e.g. $12.34 > 12.13$ $5.27 < 6.01$
Know the decimals for $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , $\frac{1}{5}$ and $\frac{1}{10}$ ( $\frac{1}{4} = 0.25$ ; $\frac{1}{2} = 0.5$ ; $\frac{3}{4} = 0.75$ , $\frac{1}{5} = 0.2$ , $\frac{1}{10} = 0.1$ )	$\frac{1}{4} = 0.25$ $\frac{1}{2} = 0.5$ ; $\frac{3}{4} = 0.75$ , $\frac{1}{5} = 0.2$ $\frac{1}{10} = 0.1$

<b>Geometry</b>		<b>Further explanation / Ideas of how to practise</b>
Check-up from Y3 & Y4	Identify pairs of parallel lines.	 <p>Lines that will never meet and are always the same distance apart.</p>
	Identify pairs of perpendicular lines.	 <p>Lines that meet at a right angle (<math>90^\circ</math>)</p>
	Identify right, acute and obtuse angles	<p>Right angles are <math>90^\circ</math> Acute angles less than <math>90^\circ</math> Obtuse angles between <math>90^\circ</math> and <math>180^\circ</math></p>

Geometry		Further explanation / Ideas of how to practise
Recognise regular polygons	<p>A regular polygon is a 2D shape with sides the same length and internal angles the same size</p>  <p>equilateral triangle    square    regular pentagon    regular hexagon    regular heptagon    regular octagon</p>	
Name types of triangles (isosceles, equilateral and scalene)	 <p> <b>equilateral</b>: 3 equal sides, 3 equal angles (60°)  <b>isosceles</b>: 2 equal sides, 2 equal angles  <b>right angle</b>: One angle is a right angle (90°). Two other angles add up to 90°. The longest side is called the hypotenuse.  <b>scalene</b>: All sides are different, All angles are different.         </p>	
Name types of quadrilaterals (parallelogram, rhombus and trapezium)	 <p> <b>parallelogram</b>: 2 pairs of equal sides, Diagonally opposite angles are equal  <b>trapezium</b>: 1 pair of sides are parallel  <b>rhombus</b>: All sides are equal, Diagonally opposite angles are equal  <b>rectangle</b>: 2 pairs of equal parallel sides, 4 right angles (90°)  <b>kite</b>: 2 pairs of sides of equal length, 1 pair of opposite angles is equal.  <b>square</b>: 4 equal parallel sides, 4 right angles (90°)         </p>	
Know 180° in a triangle.		
Know 360° is a turn.		
Know 180° is 1/2 a turn		



		Measure	Further explanation / Ideas of how to practise
Check-up from Y4	mm ↔ cm	10mm = 1cm	These facts need to be recalled quickly so they can be applied to problem solving
	cm ↔ m	100cm = 1m	
		50 cm = ½ m	
		25cm = ¼ m	
	m ↔ km	1000m = 1km	
		500m = ½ km	
		250m = ¼ km	
	ml ↔ l	1000ml = 1l.	
		500ml = ½ l	
		250ml = ¼ l	
	g ↔ kg	1000g = 1kg	
		500g = ½ kg	
		250g = ¼kg	
metric ↔ imperial	1 inch is approximately 2.5 centimetres 1 inch ≈ 2.5 cm		
	1 kilogram is approximately 2 pounds 1 kg ≈ 2 lbs		
	1 pint is approximately 560ml 1 pint ≈ 560ml		



Updated: September 2021