



Maths

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Maths - coverage Y5

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	Number Place value VIEW Free trial			Number Addition and subtraction VIEW		Number Multiplication and division A VIEW			Number Fractions A VIEW			
Spring term	Number Multiplication and division B VIEW			Number Fractions B VIEW		Number Decimals and percentages VIEW		Measurement Perimeter and area VIEW		Statistics VIEW		
Summer term	Geometry Shape VIEW			Geometry Position and direction VIEW		Number Decimals VIEW		Number Negative num... VIEW	Measurement Converting units VIEW		Measurement Volume VIEW	

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Maths - coverage Y6



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value FREE TRIAL VIEW	Number Addition, subtraction, multiplication and division VIEW						Number Fractions A VIEW		Number Fractions B VIEW		Measurement Converting units VIEW
Spring	Number Ratio VIEW	Number Algebra VIEW	Number Decimals VIEW	Number Fractions, decimals and percentages VIEW	Measurement Area, perimeter and volume VIEW							
Summer	Geometry Shape VIEW	Geometry Position and direction VIEW	Themed projects, consolidation and problem solving VIEW									

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Topic Area 	Year 5 Focus	Year 6 Focus
New Topics	None	Algebra and Ratio and Proportion
Number & Place Value	Numbers up to 1,000,000; interpreting negative numbers; rounding	Numbers up to 10,000,000 ; fuller range of negative numbers; rounding large numbers
Four Operations (ASMD)	Multiplies 4-digit by 1/2-digit; divides up to 4-digits by 1-digit	Multiplies multi-digit (up to 4 digits by 2 digits); long division by 2-digit numbers; order of operations (BODMAS/BIDMAS)
Fractions, Decimals & Percentages	Compares/orders fractions with same or related denominators; rounds to 2 decimal places	Compares/orders fractions with different denominators ; adds/subtracts and multiplies fractions; divides proper fractions by whole numbers ; uses equivalences
Measurement	Converts metric units; calculates rectangle area	Converts all standard units using decimal notation up to 3 decimal places ; converts miles/km; calculates area of parallelograms/triangles, and volume of cubes/cuboids
Geometry	Draws/measures angles; properties of rectangles	Draws 2D shapes accurately; names circle parts; finds unknown angles; describes positions on the full coordinate grid
Statistics	Interprets tables and line graphs; solves problems using line graphs	Interprets and constructs pie charts and line graphs; calculates and interprets the mean

Year 6 builds upon and significantly expands Year 5 knowledge, introducing abstract concepts foundational for secondary mathematics. 

Year 5 Maths Non-Negotiables

5.1) Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit. Eg $578\ 439 = 500\ 000 + 70\ 000 + 8\ 000 + 400 + 30 + 9$

5.2) Read, write and order numbers and numerals to 2dp Eg $34.56, 34.46, 33.09, 33.06$

5.3) Order a set of positive and negative integers Eg $4, 1, -5, -10$

5.4) Mentally, double all numbers to 100 Eg double $34 = 68$ double $87 = 174$

5.5) Use tables to derive other numbers facts Eg $3 \times 4 = 12$ so $30 \times 4 = 120$ and multiply and divide whole numbers (involving decimals) by 10, 100 and 1000 Eg $34 \div 100 = 0.34$

5.6) Explain value of digits to 2dp Eg $0.27 = 2/10 + 7/100$ and round decimal numbers to the nearest integer Eg $1.36 = 1$

5.7) Add and subtract numbers to 10,000 Eg $6,308 + 2,229 = 8,215$ $8,215 - 4,723$

5.8) Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.

Long multiplication

24×16 becomes

$$\begin{array}{r} 24 \\ \times 16 \\ \hline 240 \\ 144 \\ \hline 384 \end{array}$$

Answer: 384

124×26 becomes

$$\begin{array}{r} 124 \\ \times 26 \\ \hline 2480 \\ 7440 \\ \hline 3224 \end{array}$$

Answer: 3224

124×26 becomes

$$\begin{array}{r} 124 \\ \times 26 \\ \hline 744 \\ 2480 \\ \hline 3224 \end{array}$$

Answer: 3224

5.9) Calculate halves and doubles of decimals Eg double $2.36 = 4.72$ half $2.36 = 1.18$

5.10) Recognise and write decimal equivalents to $1/4, 1/2, 3/4$ Eg $\frac{1}{4} = 0.25$ $\frac{1}{2} = 0.5$

5.11) Multiply and divide positive numbers up to 10,000 by 10 and 100 Eg $234 \times 100 = 23,400$ $234 \div 100 = 2.34$

5.12) Calculate (including in the context of real life e.g. money, measures etc): ThHTU+HTU ThHTU-HTU HTUxTU HTU÷TU U.txU Eg A TV costs £345. A hotel owner needs to buy one TV for each room in his hotel. How much will it cost if the hotel has 26 rooms?

Year 6 Maths Non-Negotiables

6.1) Read, write, order and compare numbers up to 10 000 000 and know the value of each digit. Eg/ $4,456, 234 \times 4, 465, 235$. The value of the 6 in the first number is 6 thousand.

6.2) Use negative numbers in real life situations, and solve calculations which involve counting across zero. Eg/ The difference between -2 degrees and 5 degrees is 7 degrees.

6.3) Multiply a number with up to 4 digits by a two-digit whole number, using the long multiplication method. Eg/ 1246×48

6.4) Perform a range of different calculations mentally, including with large numbers. Eg/ $1024 - 100$

6.5) Multiply and divide decimals mentally by 10 and 100 and 1000. Eg/ $0.08 \times 10 = 0.8$, $2.5 \times 100 = 250$, $234 \div 1000 = 0.234$

6.6) Simplify fractions using common factors Eg/ $8/56 = 1/7$ and find equivalent fractions (fractions with the same value) using common multiples. Eg/ $1/8 = 3/24$

6.7) Find pairs of factors for numbers up to 100 Eg/ The factor pairs of 24 are $1 \times 24, 2 \times 12, 3 \times 8, 4 \times 6$

6.8) Calculate simple percentages of whole numbers. Eg/ 15% of $\pounds 250 = \pounds 37.50$

U.t $\pm$ U.t

Eg/ $0.9m + 0.7m$

6.9) Calculate: (including in the context of real life e.g. money, measures etc)

TU/HTUxU

Eg/ $\pounds 234 \times 8$

ThHTUxU

Eg/ $1345km \times 4$

U.t $\times$ U

Eg/ $0.6cm \times 8$

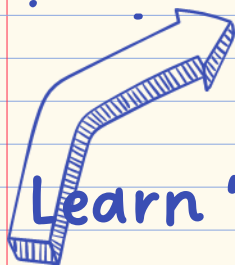
HTU/TU $\div$ U

Eg/ $550mm \div 5$

U.t $\div$ U

Eg/ $0.8 \div 4$

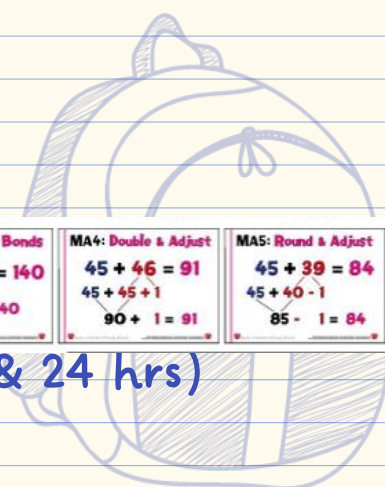
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Maths - know the basics

Learn 'their' methods - 4 operations

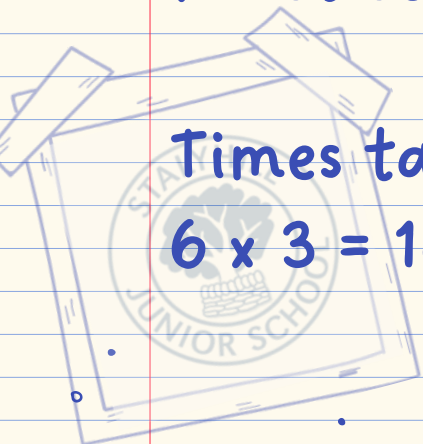
Mental strategies - RAPA CODA NUMBO



MA1: Partitioning $45 + 82 = 127$ $120 + 7 = 127$	MA2: Counting On $45 + 20 = 65$ $45 \xrightarrow{+20} 65$	MA3: Number Bonds $45 + 95 = 140$ $40 + 100 = 140$	MA4: Double & Adjust $45 + 46 = 91$ $45 + 45 + 1 = 91$ $90 + 1 = 91$	MA5: Round & Adjust $45 + 39 = 84$ $45 + 40 - 1 = 84$ $85 - 1 = 84$
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Practice reading and telling The Time (12 & 24 hrs)

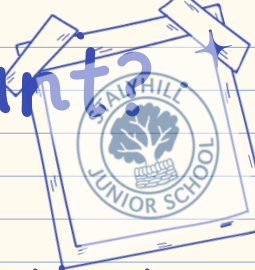
Times tables - practice, practice, practice!


$$6 \times 3 = 18$$



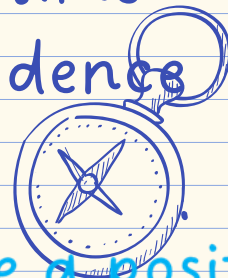
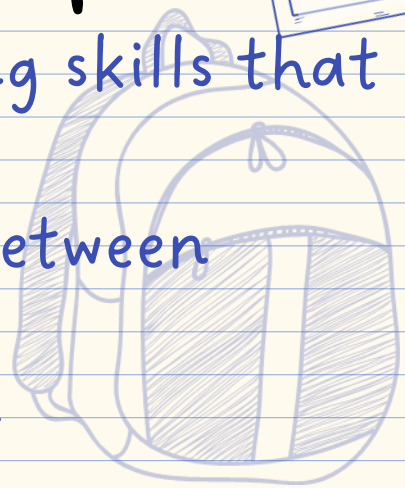
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Maths - Why is mental maths important?



'How will this help me in real life?'

- helps children to develop problem-solving skills that promote faster calculations
- allows children to see the relationship between numbers and the patterns they make
- makes maths easier when they are older
- helps with daily tasks - money, time
- creates independence and confidence
- improves memory skills



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