



Maths Knowledge Organiser for Year 3 & 4

Term: Autumn 2

Key vocabulary:

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| <ul style="list-style-type: none"> • Addition • add • plus • subtraction • subtract • takeaway • minus • columns • place value • thousands, hundreds, tens, ones • carrying numbers • decomposition | <ul style="list-style-type: none"> • multiplication • multiples • multiply • times • division • divide • inverse operations • commutative law • distributive law • integers • factors |
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Curriculum Objectives

Year 3

Number – Addition and Subtraction

Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three digit number and hundreds.

Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.

Estimate the answer to a calculation and use inverse operations to check answers.

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Number – Multiplication and Division

Count from 0 in multiples of 4, 8, 50 & 100

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.

Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.

Year 4

Number – Addition and Subtraction

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.

Estimate and use inverse operations to check answers to a calculation.

Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.

Number – Multiplication and Division

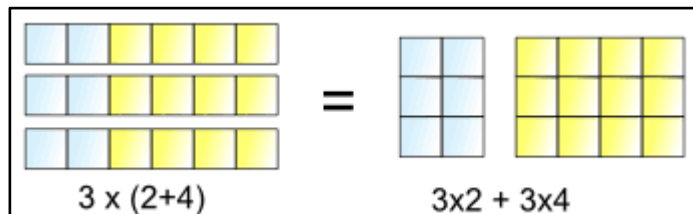
Count in multiples of 6, 7, 9, 25 & 1000

Recall and use multiplication and division facts for multiplication tables up to 12×12 .

Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Examples

$$\begin{array}{r}
 \overset{1}{6} \overset{1}{7} 5 \\
 + 247 \\
 \hline
 922
 \end{array}
 \qquad
 \begin{array}{r}
 \overset{7}{8} \overset{16}{7} \overset{1}{4} \\
 - 598 \\
 \hline
 276
 \end{array}$$



Distributive law

For more information, please see the Calculation Policy on the website.