

## Matching chart: Year 3 Mathematics

### Using and applying mathematics

2006 objectives	Autumn lessons	Spring lessons	Summer lessons
<ul style="list-style-type: none"> <li>Solve one-step and two-step problems involving numbers, money or measures, including time, choosing and carrying out appropriate calculations</li> </ul>			D3.1 Measuring units D3.2 Time puzzles E3.1 Money problems
<ul style="list-style-type: none"> <li>Represent the information in a puzzle or problem using numbers, images or diagrams; use these to find a solution and present it in context, where appropriate using £.p notation or units of measure</li> </ul>		B2.1 Number puzzles D2.2 Position, direction and movement	E3.1 Money problems
<ul style="list-style-type: none"> <li>Follow a line of enquiry by deciding what information is important; make and use lists, tables and graphs to organise and interpret the information</li> </ul>	C1.2 Pictograms	C2.1 Investigating how we spend our time	C3.2 Interpreting data
<ul style="list-style-type: none"> <li>Identify patterns and relationships involving numbers or shapes, and use these to solve problems</li> </ul>	A1.2 Adding and subtracting	B2.2 Symmetry	B3.3 2-D and 3-D shapes 2
<ul style="list-style-type: none"> <li>Describe and explain methods, choices and solutions to puzzles and problems, orally and in writing, using pictures and diagrams</li> </ul>		B2.2 Symmetry D2.2 Position, direction and movement	

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## Counting and understanding number

2006 objectives	Autumn lessons	Spring lessons	Summer lessons
<ul style="list-style-type: none"> <li>Read, write and order whole numbers to at least 1000 and position them on a number line; count on from and back to zero in single-digit steps or multiples of 10</li> </ul>	A1.1 Reading, writing and ordering whole numbers		
<ul style="list-style-type: none"> <li><i>Partition three-digit numbers into multiples of 100, 10 and 1 in different ways</i></li> </ul>		D2.1 Methods for addition and subtraction E2.2 Methods for multiplication	A3.1 Using partitioning to add and subtract
<ul style="list-style-type: none"> <li>Round two-digit or three-digit numbers to the nearest 10 or 100 and give estimates for their sums and differences</li> </ul>		A2.1 Rounding and estimating	
<ul style="list-style-type: none"> <li>Read and write proper fractions (e.g. <math>\frac{3}{7}</math>, <math>\frac{9}{10}</math>), interpreting the denominator as the parts of a whole and the numerator as the number of parts; identify and estimate fractions of shapes; use diagrams to compare fractions and establish equivalents</li> </ul>	E1.3 Fractions	B2.3 Equivalent fractions	E3.3 Comparing fractions

## Knowing and using number facts

2006 objectives	Autumn lessons	Spring lessons	Summer lessons
<ul style="list-style-type: none"> <li><i>Derive and recall all addition and subtraction facts for each number to 20, sums and differences of multiples of 10 and number pairs that total 100</i></li> </ul>	B1.1 Addition and subtraction facts	B2.1 Number puzzles	B3.1 Using number facts
<ul style="list-style-type: none"> <li>Derive and recall multiplication facts for the 2, 3, 4, 5, 6 and 10 times-tables and the corresponding division facts; recognise multiples of 2, 5 or 10 up to 1000</li> </ul>	E1.1 Multiplication patterns	E2.1 Recognising multiples	B3.1 Using number facts
<ul style="list-style-type: none"> <li>Use knowledge of number operations and corresponding inverses, including doubling and halving, to estimate and check calculations</li> </ul>	A1.2 Adding and subtracting B1.2 Multiplication facts		E3.2 Problem solving and interpreting answers

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## Calculating

2006 objectives	Autumn lessons	Spring lessons	Summer lessons
<ul style="list-style-type: none"> <li><i>Add or subtract mentally combinations of one-digit and two-digit numbers</i></li> </ul>	A1.2 Adding and subtracting	A2.2 Multiplying by 10 and 100	A3.1 Using partitioning to add and subtract
<ul style="list-style-type: none"> <li>Develop and use written methods to record, support or explain addition and subtraction of two-digit and three-digit numbers</li> </ul>		D2.1 Methods for addition and subtraction	A3.1 Using partitioning to add and subtract
<ul style="list-style-type: none"> <li>Multiply one-digit and two-digit numbers by 10 or 100, and describe the effect</li> </ul>		A2.2 Multiplying by 10 and 100	
<ul style="list-style-type: none"> <li>Use practical and informal written methods to multiply and divide two-digit numbers (e.g. <math>13 \times 3</math>, <math>50 \div 4</math>); round remainders up or down, depending on the context</li> </ul>	E1.2 Multiplying and dividing	E2.2 Methods for multiplication	E3.2 Problem solving and interpreting answers
<ul style="list-style-type: none"> <li>Understand that division is the inverse of multiplication and vice versa; use this to derive and record related multiplication and division number sentences</li> </ul>	B1.2 Multiplication facts		A3.2 Division problems
<ul style="list-style-type: none"> <li>Find unit fractions of numbers and quantities (e.g. <math>\frac{1}{2}</math>, <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math> and <math>\frac{1}{6}</math> of 12 litres)</li> </ul>	E1.3 Fractions	E2.3 Fractions and division	

## Understanding shape

2006 objectives	Autumn lessons	Spring lessons	Summer lessons
<ul style="list-style-type: none"> <li>Relate 2-D shapes and 3-D solids to drawings of them; describe, visualise, classify, draw and make the shapes</li> </ul>	B1.3 2-D and 3-D shapes 1		B3.3 2-D and 3-D shapes 2
<ul style="list-style-type: none"> <li><i>Draw and complete shapes with reflective symmetry; draw the reflection of a shape in a mirror line along one side</i></li> </ul>		B2.2 Symmetry	
<ul style="list-style-type: none"> <li>Read and record the vocabulary of position, direction and movement, using the four compass directions to describe movement about a grid</li> </ul>		D2.2 Position, direction and movement	
<ul style="list-style-type: none"> <li>Use a set-square to draw right angles and to identify right angles in 2-D shapes; compare angles with a right angle; recognise that a straight line is equivalent to two right angles</li> </ul>	B1.3 2-D and 3-D shapes 1		B3.2 Angles B3.3 2-D and 3-D shapes 2

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## Measuring

2006 objectives	Autumn lessons	Spring lessons	Summer lessons
<ul style="list-style-type: none"> <li>Know the relationships between kilometres and metres, metres and centimetres, kilograms and grams, litres and millilitres; choose and use appropriate units to estimate, measure and record measurements</li> </ul>	D1.1 Measuring		D3.1 Measuring units
<ul style="list-style-type: none"> <li><i>Read, to the nearest division and half-division, scales that are numbered or partially numbered; use the information to measure and draw to a suitable degree of accuracy</i></li> </ul>	D1.1 Measuring C1.2 Pictograms		
<ul style="list-style-type: none"> <li>Read the time on a 12-hour digital clock and to the nearest 5 minutes on an analogue clock; calculate time intervals and find start or end times for a given time interval</li> </ul>	D1.2 Time		D3.2 Time puzzles

## Handling data

2006 objectives	Autumn lessons	Spring lessons	Summer lessons
<ul style="list-style-type: none"> <li>Answer a question by collecting, organising and interpreting data; use tally charts, frequency tables, pictograms and bar charts to represent results and illustrate observations; use ICT to create a simple bar chart</li> </ul>	C1.2 Pictograms	C2.1 Investigating how we spend our time C2.2 Presenting data	C3.2 Interpreting data
<ul style="list-style-type: none"> <li><i>Use Venn diagrams or Carroll diagrams to sort data and objects using more than one criterion</i></li> </ul>	C1.1 Sorting food		C3.1 Henry VIII's ships

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