Argyle Primary School

Year 2 Yearly Overview

Green italic objectives are essential; these should prioritised within planning and revisited throughout the year. They are core learning on which next year's curriculum is based. All objectives need to be taught and, where possible, combine objectives so that application is stressed, e.g. quantities of length and multiplication.

<table>
<tr><th colspan="6">Number: Number and Place Value</th></tr>
<tr><th>Counting</th><th>Understanding place value</th><th>Identifying, representing and estimating numbers</th><th>Comparing numbers</th><th>Reading and writing numbers</th><th>Problem solving</th></tr>
<tr><td>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</td><td>Recognise the place value of each digit in a two-digit number (tens, ones)</td><td>Identify, represent and estimate numbers using different representations, including the number line.</td><td>Compare and order numbers from 0 up to 100; use <, > and = signs</td><td>Read and write numbers to at least 100 in numerals and in words</td><td>Use place value and number facts to solve problems</td></tr>
<tr><th colspan="6">Number: Addition and Subtraction</th></tr>
<tr><th colspan="6">Mental Calculation</th></tr>
<tr><td colspan="4">Add and subtract numbers:
- two-digit number and ones - adding three one-digit numbers
- two-digit number and tens - two two-digit numbers (when first 3 are established)
using concrete objects, pictorial representations, and mentally</td><td colspan="2">Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</td></tr>
<tr><th colspan="2">Number bonds</th><th colspan="2">Inverse operations, estimating and checking answers</th><th colspan="2">Problem solving</th></tr>
<tr><td colspan="2">Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</td><td colspan="2">Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</td><td colspan="2">Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods</td></tr>
<tr><th colspan="6">Number: Multiplication and Division</th></tr>
<tr><th>Multiplication and division facts</th><th>Mental calculation</th><th colspan="2">Written calculation</th><th colspan="2">Problem solving</th></tr>
<tr><td>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</td><td>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</td><td colspan="2">Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs</td><td colspan="2">Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</td></tr>
<tr><th colspan="6">Number: Fractions</th></tr>
<tr><th colspan="2">Counting in fractional steps</th><th colspan="2">Recognising fractions</th><th colspan="2">Equivalence</th></tr>
</table>

Pupils should count in fractions up to 10, starting from any number and using the ½ and 2/4 equivalence on the number line (non-statutory)	*Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity*	**Write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½**

Measurement							
Comparing & estimating	**Measuring and calculating**				**Telling the time**		
Compare and order lengths, mass, volume/capacity and record the results using >, < and =	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	Recognise and use symbols for pounds (£) and pence (p); *combine amounts to make a particular value*	*Find different combinations of coins that equal the same amounts of money*	*Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change*	Compare and sequence intervals of time	*Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times*	Know the number of minutes in an hour and the number of hours in a day

Geometry: Properties of Shape				**Geometry: Position and Direction**	
Identifying shapes and their properties			**Comparing & classifying**	**Pattern**	**Position, direction and movement**
Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]	Compare and sort common 2-D and 3-D shapes and everyday objects	Order and arrange combinations of mathematical objects in patterns and sequences	Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

Statistics		
Interpreting, constructing and representing data		
Interpret and construct simple pictograms, tally charts, block diagrams and simple tables	*Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity*	Ask and answer questions about totalling and comparing categorical data

Examples of what each objective looks like are available on NCETM's website, (National Centre for the excellence of teaching in maths), www. ncetm.org.uk. *Click on: New National Curriculum 2014 blue box – National Curriculum Resource Tool - select appropriate year group and area – click on exemplification.*

Suggested Yearly Pacer
Year 2

Ensure that pairs of calculations are taught together, addition and subtraction/ multiplication and division, as the 'doing and undoing' of each other.
Make links between multiplication and addition and subtraction and division. Links between fractions and division should be made.
Please take all opportunities to draw objectives together rather than teach discretely. The aims of fluency, reasoning and problem solving should be embedded in all teaching.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 2	Summer 2
Number		**Number**		**Number**	
Number and Place Value Addition and Subtraction Fractions	Number and Place Value Addition and Subtraction Multiplication and Division	Number and Place Value Addition and Subtraction Multiplication and Division Fractions	Number and Place Value Addition and Subtraction Multiplication and Division	Number and Place Value Addition and Subtraction Multiplication and Division Fractions	Number and Place Value Addition and Subtraction Multiplication and Division
Measurement		**Measurement**		**Measurement**	
Money Length	Time	Capacity Mass	Time Length	Money Time	Capacity Mass
Geometry		**Geometry**		**Geometry**	
Shape	Statistics	Position and Direction	Shape	Statistics	Position and Direction