Year 2 Maths Objectives

Place Value

| COUNTING | count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward |
|---------------|--|
| COMPARING | compare and order numbers from 0 up to 100; use <, > and = signs |
| NUMBERS | |
| ESTIMATING | identify, represent and estimate numbers using different representations, |
| NUMBERS | including the number line |
| READING & | read and write numbers to at least 100 in numerals and in words |
| WRITING | |
| NUMBERS | |
| UNDERSTANDING | recognise the place value of each digit in a two-digit number (tens, ones) |
| PLACE VALUE | |
| PROBLEM | use place value and number facts to solve problems |
| SOLVING | |

Addition & Subtraction

| NUMBER BONDS | recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 |
|--------------|--|
| MENTAL | add and subtract numbers using concrete objects, pictorial representations, and |
| CALCULATION | mentally, including: |
| | * a two-digit number and ones |
| | * a two-digit number and tens |
| | * two two-digit numbers |
| | adding three one-digit numbers |
| | show that addition of two numbers can be done in any order (commutative) and |
| | subtraction of one number from another cannot |
| CHECKING | recognise and use the inverse relationship between addition and subtraction |
| ANSWERS | and use this to check calculations and solve missing number problems. |
| PROBLEM | solve problems with addition and subtraction: |
| SOLVING | * using concrete objects and pictorial representations, including those |
| | involving numbers, quantities and measures |
| | * applying their increasing knowledge of mental and written methods |
| | solve simple problems in a practical context involving addition and subtraction of money |
| | of the same unit, including giving change |

Multiplication & Division

| MULTIPLICATION | count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or |
|----------------|---|
| & DIVISION | backward |
| FACTS | recall and use multiplication and division facts for the 2, 5 and 10 multiplication |
| | tables, including recognising odd and even numbers |
| MENTAL | show that multiplication of two numbers can be done in any order |
| CALCULATION | (commutative) and division of one number by another cannot |
| WRITTEN | calculate mathematical statements for multiplication and division within the |
| CALCULATION | multiplication tables and write them using the multiplication (×), division (÷) and |

| | equals (=) signs |
|---------|--|
| PROBLEM | solve problems involving multiplication and division, using materials, arrays, |
| SOLVING | repeated addition, mental methods, and multiplication and division facts, |
| | including problems in contexts |

<u>Algebra</u>

| EQUATIONS | recognise and use the inverse relationship between addition and subtraction |
|-----------|--|
| | and use this to check calculations and missing number problems. |
| | recall and use addition and subtraction facts to 20 fluently, and derive and use |
| | related facts up to 100 |
| SEQUENCES | compare and sequence intervals of time |
| | order and arrange combinations of mathematical objects in patterns |

Fractions (including decimals & percentages)

| COUNTING IN | Pupils should count in fractions up to 10, starting from any number and using |
|------------------|---|
| FRACTIONAL STEPS | the1/2 and 2/4 equivalence on the number line |
| RECOGNISING | recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, |
| FRACTIONS | shape, set of objects or quantity |
| EQUIVALENCE | write simple fractions e.g. 1/2 of 6 = 3 and recognise the equivalence of 2/4 |
| | and 1/2. |
| | MUST: Recognise that two halves make one whole. |
| | SHOULD: Recognise that four quarters make one whole. |
| | COULD: Begin to recognise that two quarters and one half are equivalent |

Geometry: Position & Direction

| POSITION, | use mathematical vocabulary to describe position, direction and movement |
|-------------|---|
| DIRECTION & | including movement in a straight line and distinguishing between rotation as |
| MOVEMENT | a turn and in terms of right angles for quarter, half and three-quarter turns |
| | (clockwise and anti-clockwise) |
| PATTERN | order and arrange combinations of mathematical objects in patterns and |
| | sequences |

Geometry: Properties of shape

| IDENTIFYING SHAPES & THEIR PROPERTIES | 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] |
| COMPARING & CLASSIFYING | compare and sort common 2-D and 3-D shapes and everyday objects |

Measurement

| COMPARING & compare and order lengths, mass, volume/capacity and record the result | ts |
|--|----|
|--|----|

| ESTIMATING | using >, < and = |
|------------------|---|
| | compare and sequence intervals of time |
| MEASURING & | choose and use appropriate standard units to estimate and measure |
| CALCULATING | 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 |
| TELLING THE 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. |
| | MUST: Read time to hour on analogue or 12-hour digital clock. |
| | SHOULD: Read time to half hour on analogue / 12 hour digital clocks. |
| | COULD: Read time to half and quarter hour on analogue and 12-hour digital |
| | clocks. |
| | know the number of minutes in an hour and the number of hours in a day. |
| CONVERTING | know the number of minutes in an hour and the number of hours in a day. |
| | (appears also in Telling the Time) |

Statistics

| INTERPRETING, | interpret and construct simple pictograms, tally charts, block diagrams and |
|-----------------|---|
| CONSTRUCTING & | simple tables |
| PRESENTING DATA | 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 |