Pirton Hill Primary School Assessment Framework for Maths

Year 2 Expectations

Number and Place Value

- Count in steps of 2, 3, and 5 from 0, and in tens from any number forward and backward.
- Recognise the place value of each digit in a two- digit number (tens, ones)
- Partition two-digit numbers into different combinations of tens and ones. (This may include using apparatus).
- Identify, represent and estimate numbers using different representations, including the number line.
- Compare and order numbers from 0 up to 100; use < ,> and = signs.
- Read and write numbers to at least 100 in numerals and words.
- Use place value and number facts to solve problems
- Can recognise odd and even numbers.

Addition and Subtraction

- 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.
- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- Add and subtract numbers within 100, using written methods, concrete aparatus, pictorial representations, and mentally, including:
    - A two digit number and ones
    - A two digit number and tens
    - Two 2- digit numbers
    - Adding three one digit numbers.
- Subtract mentally a two-digit number from another two-digit number when there is no re-grouping required.
- Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
- Use estimation to check that their answers to a calculation are reasonable (e.g. knowing that 48+35 will be less than 100).

Multiplication and Division

- Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, to solve simple problems, demonstrating an understanding of commutativity as necessary.
- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.
- Show that multiplication of two numbers can be done in any order (commutative) and division of one number from another cannot.
- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.

Fractions

- Recognise, identify, name and write fractions1/3, ¼, ½ 2/4 and ¾ of a length, shape, set of objects or quantity.
- Know that all parts must be equal parts of a whole.
- Write simple fractions for example ½ of 6 =3 and recognise the equivalence of 2/4 and ½.

Measurement

- Choose and use appropriate standard units to estimate and measure:
  - length/height in any direction (m/cm)
  - mass (Kg/g)
  - temperature (ºC)
  - Capacity (litres/ml)
- Measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.
- Read scales in divisions of ones, twos, fives and tens in a practical situation where all numbers on the scale are given / not all numbers in the scale are given.
- Compare and order lengths, mass, volume/capacity and record the results using >,< and =
- Recognise and use the symbols for pounds (£) and pence (p); combine amounts to make a particular value.
- Find different combinations of coins that equal the same amount of money.
- Solve problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
- Compare and sequence intervals of time.
- Read the time on the clock to the nearest 15 minutes.
- Know the number of minutes in an hour and the number of hours in a day.

Geometry – Properties of shapes

- 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 and everyday objects

Geometry – Position and direction

- Organise 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 a quarter, half and three-quarter turns (clockwise and anti-clockwise).

Statistics

- 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.

Greater Depth

These objectives must be completed in addition to all those above for a child to be awarded Greater Depth in the KS1 SATS tests.

- Reason about addition (e.g. that the sum of 3 odd numbers will always be odd)
- Use multiplication facts to make deductions outside known multiplication facts. (E.g. A pupil knows that multiples of 5 have one digit of 0 or 5 and uses this to reason that 18 x 5 cannot be 92, as it is not a multiple of 5)
- Work out mental calculations where regrouping is required.
- Solve more complex missing number problems.
- Determine remainders given know facts.
- Solve word problems that involve more than one step.
- Recognise the relationship between addition and subtraction and can rewrite addition statement as simplified multiplication statements.
- Find and compare fractions of amounts.

- Read the time on the clock to the nearest 5 minutes.
- Read scales in divisions of ones, twos, fives and tens in a practical situation where not all numbers on the scale are given.
- Can describe similarities and differences of shape properties.