



## Milborne First School Maths – Achieving Mastery

At Milborne First School we understand the National Curriculum to be a mastery curriculum. We believe to show mastery of the Maths curriculum children need to be able to demonstrate key skills or concepts independently. What constitutes independent Maths has been defined and agreed within Milborne School under the following principles;

### Maths is likely to be independent if it:

- emerges from a quality question, problem or cross curriculum experience, in which pupils have had a range of opportunities to explore and discuss the question or problem
- enables pupils to apply their learning independently, with an element of choice, for example how to record their workings, which manipulatives to use
- is in response to prior paired or group work
- is produced by pupils who have independently drawn on any classroom resources including displays, number lines
- is informed by clear learning objectives which are not over detailed and do not over-aid pupils
- is during a conversation with a teacher who asks questions e.g. Tell me how you worked it out, why you did it that way, prove to me that it is correct
- is when a child chooses to draw a number bond or write the equation following practical work
- is unaided answers to the NCTEM teaching for mastery questions and tasks
- is as part of an external assessment eg. SAT's paper (no access to resources/manipulatives)

### YEAR 2

Partition two - digit numbers into different combinations of tens and ones.

Be able to partition flexibly, all the ways to make and partition any number up to 20.

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers

Use estimation to check their answers are reasonable

Subtract mentally a two-digit number from another two-digit number when there is no regrouping required (e.g.  $74 - 33$ )

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Recognise, find, name and write fractions  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{2}{4}$  and  $\frac{3}{4}$  of a length, shape, set of objects or quantity.

Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( $^{\circ}\text{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.

Read scales in divisions of 1's, 2's, 5's, 10's when divisions given

Find different combinations of coins that equal the same amounts of money.

Tell and write the time to fifteen minutes, including quarter past/to the hour and draw the hands on a clock face to show these times

Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.

Mastery is the achievement of these skills and concepts, other elements within the National Curriculum we have defined as requiring coverage not mastery. Children who show understanding of the key skills and concepts beyond mastery and in a wide

range of different situations and contexts are deemed to be working at greater depth. This will be evidenced through the use of the NCETM Teaching for Mastery with greater depth materials or external assessments.