## Cookridge Primary School: Year 5 Objectives - Mathematics

|     |   |               | -        |       |       |       |       |       |
|-----|---|---------------|----------|-------|-------|-------|-------|-------|
| Bas | ic Skills (Fluency) by the end of Year 5:   |               | Baseline | Aut 2 | Spr 1 | Spr 2 | Sum 1 | Final |
| 1.  | Read, write, order and compare numbers to at least 1 000 000 and determine the <b>value of each digit</b> .                       |               |          |       |       |       |       |       |
| 2.  | Read, write, order and compare numbers with up to <b>three decimal places</b> .   |               |          |       |       |       |       |       |
| 3.  | Recap on number bonds and bridging through any given numbers.   |               |          |       |       |       |       |       |
| 4.  | <b>Recall</b> multiplication and division facts for multiplication tables up to $12 \times 12$ .                                  |               |          |       |       |       |       |       |
| 5.  | <b>Round</b> any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 and those numbers with <b>decimals</b> . |               |          |       |       |       |       |       |
| 6.  | Recall Mathematical facts and vocabulary related to mathematical  |               |          |       |       |       |       |       |
|     | understanding e.g. Measure – 1Km=1000m, Geometry – identify:  |               |          |       |       |       |       |       |
|     | angles at a point and one whole turn (total 360°), angles at a point  |               |          |       |       |       |       |       |
|     | on a straight line and 2 1 a turn (total 180°), other multiples of 90°.   |               |          |       |       |       |       |       |
| Кеу | Learning for Secure   | к.            | Baseline | Aut 2 | Spr 1 | Spr 2 | Sum 1 | Final |
|     | Place Value   | check.        |          |       |       |       |       |       |
| 1.  | Count through 0 both forwards and backwards, including decimals   | to            |          |       |       |       |       |       |
|     | and negative numbers.   | ion           |          |       |       |       |       |       |
| 2.  | Read <b>roman numerals</b> to 1000.   | operation to  |          |       |       |       |       |       |
| 3.  | Solve number problems and <b>practical problems</b> involving the basic skills (Fluency).   | inverse op    |          |       |       |       |       |       |
| Add | ition and Subtraction (Teach inverse e.g. 7+3=10/10-7=3)  | ve            |          |       |       |       |       |       |
| 4.  | Add and subtract numbers with more than <b>4 digits</b> using the formal  | e iL          |          |       |       |       |       |       |
|     | written methods of columnar addition and subtraction where  | use           |          |       |       |       |       |       |
|     | appropriate.  | and           |          |       |       |       |       |       |
| 5.  | Solve addition and subtraction <b>multi-step problems</b> in contexts, deciding which operations and methods to use and why.      | calculation a |          |       |       |       |       |       |
| Mul | tiplication and Division (Teach inverse e.g. 2x5=10/10÷2=5)   | Inla          |          |       |       |       |       |       |
| 6.  | Multiply and divide whole numbers and those involving <b>decimals by</b>  | calc          |          |       |       |       |       |       |
| 0.  | 10, 100 and 1000.   | or c          |          |       |       |       |       |       |
| 7.  | Recognise and use square numbers and cube numbers.  |               |          |       |       |       |       |       |
| 8.  | Multiply numbers up to <b>4 digits</b> by a one- or two-digit number using a formal written method.                               | problem       |          |       |       |       |       |       |
| 9.  | Divide numbers up to 4 digits by a one-digit number using the formal  | оа            |          |       |       |       |       |       |
| 5.  | written method of short division.   | er t          |          |       |       |       |       |       |
|     | Fractions (Decimals)  | answer to     | <u> </u> |       |       |       |       |       |
|     | <b>Compare, order and add fractions</b> with the same denominator or denominators that are multiples of the same number.          | e             |          |       |       |       |       |       |
| 11  | Recognise <b>mixed numbers</b> and <b>improper fractions</b> and convert from   | te            | <u> </u> |       |       |       |       |       |
| 11. | one form to the other.  | Estimate th   |          |       |       |       |       |       |
| 12. | Multiply proper fractions and mixed numbers by whole numbers,   | Esti          |          |       |       |       |       |       |
|     | supported by materials and diagrams.  |               |          |       |       |       |       |       |
| 13. | Solve problems which require knowing percentage and decimal   |               |          |       |       |       |       |       |
|     | equivalents of ½ ¼ 2/5 4/5.   |               |          |       |       |       |       |       |
| I   | Measurement (Every half term)   |               |          |       |       |       |       |       |
|     | <ul> <li>Measure and calculate the perimeter and area of composite</li> </ul>   |               |          |       |       |       |       |       |
|     | rectilinear shapes in cms and ms.   |               |          |       |       |       |       |       |
| M2  | – Estimate volume and capacity.   |               |          |       |       |       |       |       |
|     | Geometry (Every half term)  |               | <u> </u> |       |       |       |       |       |
|     | - Identify 3-D shapes, including cubes and other cuboids, from 2-D  |               |          |       |       |       |       |       |
| 51- | representations, distinguishing 2D regular and irregular polygons.  |               |          |       |       |       |       |       |
| 62  | Draw given angles, and measure them in degrees (°) and recognise  |               |          | +     |       |       |       |       |
|     |   |               |          |       |       |       |       |       |
|     | those that are <b>acute, obtuse</b> and <b>reflex</b> angles.   |               |          |       |       |       |       |       |
|     | itatistics  |               |          |       |       |       |       |       |
|     | <b>Complete, read</b> and <b>interpret</b> information in tables, graphs and  |               |          |       |       |       |       |       |
|     | charts using and applying the basic fluency skills.   |               |          |       |       |       |       |       |