Cookridge Primary School: Year 6 Objectives - Mathematics

Basic Skills (Fluency) by the end of Year 6:	Baseline	Aut 2	Spr 1	Spr 2	Sum 1	Final
1. Read, write, order and compare numbers to at least 10,000,000 and determine the **value of each digit.**						
2. Read, write, order and compare numbers with up to **three** decimal places.						
3. Recap on number bonds and bridging through **given** numbers.						
4. **Recall** multiplication and division facts for multiplication tables up to 12 × 12.						
5. **Round** any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 and those numbers with decimals.						
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 1/2 a turn (total 180°), other multiples of 90°.						

Key Learning for Secure	Baseline	Aut 2	Spr 1	Spr 2	Sum 1	Final
Place Value 1. The pupil can demonstrate an understanding of place value, including **large numbers and decimals**.						
2. Child to count in **1/3s, 1/5s, 1/8s**.						
Addition and Subtraction (Teach inverse e.g. 7+3=10/10-7=3) 3. The pupil can calculate mentally, using efficient strategies such as manipulating expressions using commutative and distributive properties to simplify the calculation (e.g. 53 – 82 + 47 = 53 + 47 – 82 = 100 – 82 = 18; 20 × 7 × 5 = 20 × 5 × 7 = 100 × 7 = 700; 53 ÷ 7 + 3 ÷ 7 = (53 +3) ÷ 7 = 56 ÷ 7 = 8).						
4. The pupil can use formal methods to solve multi-step problems.						
Multiplication and Division (Teach inverse e.g. 2x5=10/10÷2=5) 5. The pupil can use formal methods to solve multi-step problems (e.g. find the change from £20 for three items that cost £1.24, £7.92 and £2.55; a roll of material is 6m long: how much is left when 5 pieces of 1.15m are cut from the roll?; a bottle of drink is 1.5 litres, how many cups of 175ml can be filled from the bottle, and how much drink is left?).						
Fractions (Decimals) 6. The pupil can recognise the relationship between fractions, decimals and percentages and can express them as equivalent quantities(e.g. one piece of cake that has been cut into 5 equal slices can be expressed as 1/5 or 0.2 or 20% of the whole cake).						
7. The pupil can calculate using fractions, decimals or percentages(e.g. knowing that 7 divided by 21 is the same as 7/21).						
Measurement (Every half term) M1 – The pupil can calculate with measures (e.g. calculate length of a bus journey given start and end times; convert 0.05km into m and then into cm).						
Geometry (Every half term) G1 – The pupil can substitute values into a simple formula to solve problems (e.g. perimeter of a rectangle or area of a triangle.						
G2 - The pupil can use mathematical reasoning to find missing angles (e.g. the missing angle in an isosceles triangle when one of the angles is given; the missing angle in a more complex diagram using knowledge about angles at a point and vertically opposite angles).						

(Vertical sidebar text: Estimate the answer to a problem or calculation and use inverse operation to check.)