

Maths – Year 5/6
(Based on White Rose Version 3)

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Year 5	Place Value Roman Numerals; read & write numbers to 1,000,000; powers of 10; 10, 100, 1000, 10,000, 100,000 more or less; partition numbers to 1,000,000; compare & order to 1,000,000; round to 10, 100, 1000.		Addition & Subtraction Mental strategies; add & subtract whole numbers with more than four digits; multi-step problems; find missing numbers.		Multiplication & Division A Multiples; common multiples; factors ; common factors; prime numbers ; square numbers ; cube numbers; multiply & divide by 10, 100, 1000.		Multiplication & Division B Multiply up to 4-digit numbers by 1-digit number; multiply a 2-digit number by a 2-digit number; multiply a 3-digit number by a 2-digit number; multiply a 4-digit number by a 2-digit number; short division; divide a 4-digit number by a 1-digit number; divide with remainders.		Fractions A Find fractions equivalent to a unit fraction and non-unit fraction; convert improper fractions to mixed numbers (and vice versa); compare & order fractions less than 1 and greater than 1; add and subtract fractions with the same denominator; add fractions within 1; add fractions with a total greater than 1; add to a mixed number; add two mixed numbers; subtract fractions; subtract from a mixed number; subtract two mixed numbers.			
	Year 6	Place Value Numbers to 1,000,000 10,000,000; read & write numbers to 10,000,000; powers of 10; compare, order & round integers; negative numbers.		Addition, Subtraction, Multiplication & Division Add and subtract integers; common factors ; common multiples ; rules of divisibility; primes to 100 ; square and cube numbers; multiply up to a 4-digit number by a 2-digit number; short division; long division (with and without remainders); order of operations (BODMAS).								Fractions A Equivalent fractions and simplifying; compare and order fractions; add and subtract simple fractions; add and subtract any two fractions; add mixed numbers; subtract mixed numbers; multi-step problems.	
Spring	Year 5	Fractions B Multiply a unit & non-unit fraction by an integer; multiply a mixed number by an integer; calculate a fraction of a quantity; find the whole.		Decimals & Percentages Decimals up to 2dp; equivalent fractions and decimals (tenths, hundredths, thousandths); order & compare decimals; round to nearest whole number; round to 1dp; percentages as fractions and decimals ; multiply and divide decimals by 10, 100, 1000 .			Perimeter & Area. Volume. Perimeter of rectangles, rectilinear shapes, polygons; area of rectangles & compound shapes; estimate area. Compare & estimate volume & capacity.		Statistics Draw, read and interpret line graphs; read and interpret tables; two-way tables; read and interpret timetables.		Consolidation		
	Year 6	Fractions B Multiply fractions by integers; multiply fractions by fractions; divide a fraction by an integer; fraction of an amount ; find the whole.		Decimals Place value within 1; round decimals; add & subtract decimals; multiply & divide by 10, 100, 1000; multiply & divide decimals by integers	Fractions, Decimals & Percentages Equivalent fractions, decimals & percentages; order fractions, decimals and percentages; percentage of an amount ; percentages – missing values.		Area, Perimeter & Volume Area & perimeter; area of triangles (counting squares); area of right-angles triangle; area of any triangle; area of parallelogram; volume (counting cubes); volume of cuboid.		Statistics Line graphs; dual bar charts; read and interpret pie charts; pie charts and percentages; draw pie charts; the mean.		Ratio Ratio & fractions; scale drawing; scale factors; recipes.	Algebra 1 and 2-step function machines; form expressions; substitution; formulae; find pairs of values.	
Summer	Year 5	Shape Understand & use degrees; classify, estimate and measure angles; draw lines and angles; calculate angles around a point, on a straight line; regular and irregular polygons; 3D shapes.			Position & Direction Read & plot coordinates; translation with coordinates; lines of symmetry; reflection in horizontal and vertical lines.		Converting Units kg, km, mm, ml; convert units of length; convert between metric and imperial units ; convert units of time.		Decimals Complements to 1; add & subtract decimals across 1; add/subtract decimals with different number of decimal places.		Negative Numbers Understand negative numbers; count through zero in 1s and multiples; compare and order negative numbers; find the difference.	Consolidation	
	Year 6	Shape Measure & classify angles; calculate angles; angles in a triangle – include missing angles; angles in a quadrilateral and polygons; circles; draw shapes; nets of 3D shapes.			Position & Direction First quadrant; read & plot points in four quadrants; translations; reflections.		Converting Units Convert metric measure; calculate metric measures; miles and km; imperial measures.		Consolidation and transition prep.				

Mathematics Scheme of Work – Guidance

This document serves as your official Mathematics Scheme of Work and is based on Version 3 of the White Rose Maths curriculum. Where possible, I have aligned the units across both year groups to ensure that pupils are working on similar mathematical themes concurrently.

Each unit title is hyperlinked to the relevant section on the White Rose website to support your planning. However, **please use this document as your primary planning tool** rather than relying directly on the White Rose site, as this version has been specifically adapted to meet our curriculum and teaching approach.

Mathematics Lesson Structure and Expectations

To ensure consistency in the teaching and learning of mathematics across the school, all staff are expected to follow the agreed structure for every maths lesson. This consistency is vital both for the quality of instruction and for the clarity and organisation of pupils' work. OFSTED will be looking for consistency across the school.

Lesson Structure

Each maths lesson must follow the structure outlined below:

1. Quick Recall Starter (Approx. 10 minutes)

- **Key Stage 2:** Focus on times tables and corresponding division fact recall.
- **Key Stage 1:** Focus may include the term's KIRF (Key Instant Recall Facts), number bonds, or recall of x2, x5, and x10 multiplication facts in Year 2.

2. Main Input

- Whole-class teaching focusing on the concept, using appropriate representations and models.

3. Independent Task

- Adapted appropriately to support and challenge all learners.

4. Reasoning/Problem-Solving Task/Plenary.

- All pupils must access a reasoning or problem-solving activity in every lesson.
- These may be taken from the White Rose resources and adapted as:
 - A task copied and pasted into an individual worksheet, or
 - A whole-class plenary activity (particularly appropriate in KS1).

Pre- and Post-Learning Tasks

- Each unit must begin with a **pre-learning task**, which is used diagnostically to assess which pupils require conceptual/procedural input and which may be ready to move directly to application, reasoning, and problem-solving.
- These groups may vary from lesson to lesson, based on pupils' responses.
- Every unit must end with a **post-learning task**, allowing teachers to assess progress and identify any remaining misconceptions.
- **Both pre- and post-learning tasks must be securely fixed into pupil folders using plastic wallets**, forming clear 'bookends' to each unit's recorded work.

Presentation and Organisation

- Every worksheet must clearly include:
 - The **learning objective**.
 - The **lesson number and page reference** (e.g., *Lesson 1: Page 1*).
- Please refer to the examples sent via email for formatting expectations.
- It is essential that all maths folders are consistently organised and presented across the school.

By adhering to this structure and guidance, we can ensure high-quality maths provision and a clear, cohesive learning journey for all pupils.

Fluent in Five – Daily Maths Fluency Sessions

All classes are expected to deliver a **daily Fluent in Five session** in addition to the main maths lesson. These short sessions are designed to build and reinforce arithmetic fluency through regular, consistent practice with key number skills/procedures.

Key Information:

- Sessions should take place **daily** and focus on developing speed and accuracy in mental and written calculation strategies.
- At least one question each day should be linked to the term's **KIRF (Key Instant Recall Fact)**.

Foundation Stage and Key Stage 1:

- Once Reception and Key Stage 1 are fully established with the **Mastering Number** programme, this will replace Fluent in Five as the daily fluency session.
- Until then, classes should continue with daily Fluent in Five activities to support arithmetic development.

These fluency sessions are a vital part of our school-wide approach to improving mathematical confidence and number sense. Please ensure they are planned for and delivered consistently.