Cover notes for New Mathematics curriculum

The teaching year.

Each term, children will cover a range of mathematical learning, with a short half term break in between.

Initially, the teaching will be centred on conceptual introductions to their new objectives.

During term 1 and 2, when the conceptual introductions have been used, children will move to working on using written methods to calculate and learn.

In term 3, children will be exploring depth and breadth to apply what they have learnt and to extend their learning further.

Organisational Vocabulary:

Area, Areas **A1, area1 etc.**	Replacing 'block'. The newly mapped curriculum is organised into 7 **areas** of learning, based on the new mathematics curriculum.
Term	Replacing 'Units'. Term 1, 2 and 3 represent Autumn, Spring and summer term respectively.
Key Area **A1, A2, A3, A4**	These are areas of the new mathematics curriculum which are central to children's understanding. These concepts, skills and understanding should be applied widely throughout **T1, 2, and 3,** and will receive focussed teaching in all terms.
Secondary Area **A5, A6, A7**	These are the areas of the new mathematics curriculum that sit closely behind the **key Areas.** These include skills that must be taught discreetly initially, but often can be taught and consolidated in other areas of mathematics, or during cross-curricular lessons elsewhere in the school day.

Seven Areas of mathematical learning:

Each **area** has a short example of the objectives included in these areas

A1 Number and place value	Writing numbers correctly in digits and words, ordering and placing each digit correctly, Counting and working in sequences, Positive and negative numbers, Comparing numbers Estimating and rounding numbers.
A2 Calculation	Four operations used mentally and with written methods Solving single and multistep problems. Using number bonds and inverse facts Using models and images to organise thoughts Multiples and factors
A3 Algebra	Solving missing number problems Sequencing and finding rules Explaining understanding.
A4 Fractions and amounts	Dividing shapes and quantities into fractions, Using common fractions to organise things. Finding fractions of a number in context Using improper fractions and mixed fractions Proportion of something to another Ratio problems and understanding.
A5 Measuring	Measuring in standard and non standard units Converting measures from one to another. Estimating and measuring volume Adding and subtracting money Working with digital and analogue time, solving time problems, reading time accurately Area and perimeter
A6 Shape and position	Lines of symmetry reflective lines. Drawing and measuring angles, comparing angles Recognising 2d and 3d shapes and describing their properties. Express turning and moving in directions including NSEW etc Turning and moving in degrees. Recognise and label parts of a shape, parts of a circle, understanding radius and diameter.
A7 Statistics and data	Collecting data reliably Pictograms, tally charts, bar charts. Calculate the mean average. Pie charts and line graphs.

Initial points:

- An investigation and problem solving approach is central to all of the teaching of mathematics, whether **key** or **secondary** areas.
  Key areas should be embedded in all mathematics teaching if possible.

- Similar form to the previous curriculum front sheets with overarching blocks arranged into three separate sections so objectives and outcomes are clear for planning

- Some **key areas** of mathematical learning have been shifted from one old block to another, to more cohesively combine objectives into a clear and progressive teaching sequence

- Some **secondary areas** of mathematical learning have been omitted from the three termly old block structure to free up more teaching time for more important areas.

  For example: collecting data will now no longer take up maths lessons, and will instead be taught cross in a cross-curricular way to protect key maths teaching time.

- Objectives for each Area of Mathematics will be organised into terms, but it is the assessment and choice of the teachers that controls the pace of learning within the Areas and Terms.

  For example: If teachers assess children's understanding of 2d shape properties is above embedded/expected, then several options are available.
  1. Then they can choose to challenge children further using the objectives from the next year group's curriculum map
  2. They can consolidate learning from the previous area by embedding new learning into previous objectives
  3. They can prepare children for the next area by embedding new learning into a task which introduces the objectives from the next area.