Year 4 – Autumn MTP

**If the first week back is not a full week then this should be used as additional days to cover the content of 'Week 1' and 'Week 2' so that there is closer to 3 weeks to cover the content.*

	Main Focus & Independent work
Week 1	Place value: • Represent numbers to 1,000 • Partition numbers to 1,000 • Number line to 1,000 • Thousands
Week 2	Place value: • Represent numbers to 10,000 • Partition numbers to 10,000 • Flexible partitioning of numbers to 10,000 • Find 1, 10, 100 or 1,000 more or less
Week 3	Place value: • Estimate on a number line to 10,000 • Compare numbers to 10,000 • Order numbers to 10,000 • Roman numerals
Week 4	Place value • Rounding to nearest 10 • Round to nearest 100 • Round to the nearest 1000
Week 5	Addition and Subtraction: • Add and subtract multiples 1s, 10s, 100s and 1000s. • Add two 4 digit numbers – no exchanging • Add two 4 digit numbers – one exchange • Add two 4 digit numbers – more than one exchange
Week 6	Addition and Subtraction: • Subtract two 4 digit numbers – no exchanging • Subtract two 4 digit numbers – one exchange • Subtract two 4 digit numbers – more than one exchange
Week 7	Addition and Subtraction: • Efficient addition and subtraction • Estimate answers • Explore strategies for checking
Week 8	Measure: • What is area? • Counting squares • Making shapes • Comparing area
Week 9	Multiplication and Division: • Multiples of 3 • Multiply and divide by 6 • 6 times-table and division facts • Multiply and divide by 9 • 9 times-table and division facts • The 3, 6 and 9 times-tables
Week 10	Multiplication and Division: • Multiply and divide by 7 • 7 times-table and division facts • 11 times-table and division facts • 12 times-table and division facts

Week 11	Multiplication and Division: • Multiply by 1 and 0 • Divide a number by 1 and itself • Multiply three numbers
Week 12	Consolidation

Year 4 – Spring MTP

**If the first week back is not a full week then this should be used as additional days to cover the content of 'Week 1' and 'Week 2' so that there is closer to 3 weeks to cover the content.*

	Main Focus & Independent work
Week 1	Multiplication and Division: • Factor pairs • Use factor pairs • Multiply by 10 • Multiply by 100 • Divide by 10
Week 2	Multiplication and Division: • Divide by 100 • Related facts – multiplication and division • Informal written methods for multiplication • Multiply a 2-digit number by a 1-digit number • Multiply a 3-digit number by a 1-digit number
Week 3	Multiplication and Division: • Divide a 2-digit number by a 1-digit number (1) • Divide a 2-digit number by a 1-digit number (2) Divide a 3-digit number by a 1-digit number • Correspondence problems • Efficient multiplication
Week 4	Measure: • Measure in kilometres and metres • Equivalent lengths (kilometres and metres) • Perimeter on a grid • Perimeter of a rectangle • Perimeter of rectilinear shapes
Week 5	Shape: • Find missing lengths in rectilinear shapes • Calculate perimeter of rectilinear shapes • Perimeter of regular polygons • Perimeter of polygons
Week 6	Fractions: • Understand the whole • Count beyond 1 • Partition a mixed number • Number lines with mixed numbers • Compare and order mixed numbers
Week 7	Fractions: • Understand improper fractions • Convert mixed numbers to improper fractions • Convert improper fractions to mixed numbers • Equivalent fractions on a number line • Equivalent fraction families
Week 8	Fractions: • Add two or more fractions • Add fractions and mixed numbers • Subtract two fractions • Subtract from whole amounts • Subtract from mixed numbers
Week 9	Decimals:

	• Tenths as fractions • Tenths as decimals • Tenths on a place value chart • Tenths on a number line • Divide a 1-digit number by 10
Week 10	Decimals: • Divide a 2-digit number by 10 • Hundredths as fractions • Hundredths as decimals • Hundredths on a place value chart • Step 10 Divide a 1- or 2-digit number by 100

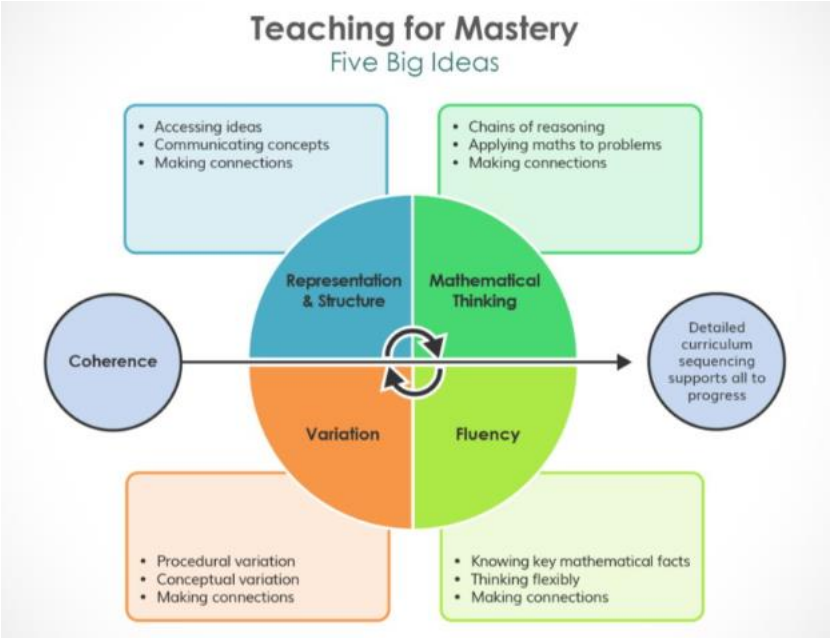
Year 4 – Summer MTP

	Main Focus & Independent work
Week 1	Decimals: • Make a whole with tenths • Make a whole with hundredths • Partition decimals • Flexibly partition decimals
Week 2	Decimals: • Compare decimals • Order decimals • Round to the nearest whole number • Halves and quarters as decimals
Week 3	Money: • Write money using decimals • Convert between pounds and pence • Compare amounts of money
Week 4	Money: • Estimate with money • Calculate with money • Solve problems with money
Week 5	Time: • Years, months, weeks and days • Hours, minutes and seconds
Week 6	Time: • Convert between analogue and digital times • Convert to the 24-hour clock • Convert from the 24-hour clock
Week 7	Shape: • Understand angles as turns • Identify angles • Compare and order angles • Triangles
Week 8	Shape: • Quadrilaterals • Polygons • Lines of symmetry • Complete a symmetric figure
Week 9	Statistics: • Interpret charts • Comparison, sum and difference • Interpret line graphs • Draw line graphs
Week 10	Position and Direction: • Describe position using coordinates • Plot coordinates • Draw 2-D shapes on a grid • Translate on a grid • Describe translation on a grid
Week 11	Consolidation
Week 12	Consolidation

Maths at St Michael's V.A. Junior School

'We aim to develop a love of mathematics and create an atmosphere where all children strive to learn.'

At St Michael's we follow the 'Teaching for Mastery' approach, acquiring a deep, long-term, secure and adaptable understanding of the subject for all our pupils. We incorporate elements of 'The Five Big Ideas' throughout each lesson.



Every class has a daily maths lesson (1 hour in years 3, 4 and 5 and 1 ¼ hours in year 6). In addition, years 3, 4 and 5 have a daily mastering number session (10-15 minutes). Classes have a TTrockstars/Tackling tables session each week and year 6 also use Learning By Question.

Planning

We plan in line with our Maths Medium Term Plans and following our maths lesson structure. Planning is consistent across all classes within a year group. We do not follow a scheme but use a variety of resources to support our planning such as PowerMaths, White Rose and the NCETM.

Daily maths lesson structure

- **Fluency starter** – e.g fluent in 5; a set of questions where the focus is on fluency.
- **Short counting activity**
- **Whole class teaching of the main objective** - the lesson is sequenced in small cohesive steps with use of carefully selected representations. An appropriate stem sentence which supports the learning is displayed on the smart slides and referenced during the lesson. This part of the lesson is a 'ping pong' style with children having paired discussions and working on whiteboards to respond to questions.
- I**ndependent work –** a set of carefully selected questions, including procedural variation that are a natural progression from the main class teaching. All children complete the same questions; adaptation is through support and progression.
- **Finisher's challenge –** an activity/question to extend and deepen the thinking of children who successfully complete the independent work.

On a Friday, the main and independent part of the lesson has a reasoning starter and then an arithmetic focus.

Ingredients of a good maths lesson:

- Previous learning reviewed
- Whole class moving together
- Precise and accurate mathematical language
- Small steps (across and between lessons)
- Fluency of number facts
- Stem sentences
- Partner talk
- Representations and modelling of examples
- Physical resources
- Misconceptions and difficulty points highlighted
- Variation (conceptual and procedural) and non-examples
- Problems in context
- Depth/challenge questions and mathematical thinking
- Questions asked to expose structure
- Formative assessment and quick intervention

Interventions

- **Same day intervention** – a short input to address misconceptions and work through some examples with children who have 'not quite' grasped the content of the lesson. This takes place on the same day, after the maths lesson.
- **Pre-teach session** – a week 20 minute session for the lowest attaining pupils (15-20% of the year group) to pre-teach key skills required to access learning in the upcoming lessons.
- **Hot marking** – we check children's work throughout the maths lesson and provide verbal feedback to support learning.

Equity

We teach maths as a whole class, moving together and are adaptive in our approaches to enable equitable practice. These are some strategies that we use:

- **Pre-teach** – weekly pre-teach of key skills to support upcoming learning.
- **Revisit Prior learning** – linking concepts and providing small steps. Low threshold entry tasks.
- **Stem sentences –** shared and rehearsed together.
- **Partner talk** – Providing time to think, rehearse and clarify understanding.
- **Representations** – use of appropriate representations to expose structures.
- **Manipulatives** – available for all learners, to expose structures.
- **Maths mats** – containing key mathematical concepts and supporting representations.
- **Gestures** – supporting understanding and visualisation.

Assessment

Formative assessment takes place during each lesson and misconceptions are quickly addressed.

Summative assessment takes place termly in years 3, 4 and 5 using White Rose Assessments.

Summative assessment takes place half-termly in year 6 using past SATs papers.