Year 3 – 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 100 • Partition numbers to 100 • Number line to 100 • Represent numbers to 1,000 • Partition numbers to 1,000 • Flexible partitioning of numbers to 1,000
Week 2	Place Value: • Hundreds, tens and ones • Find 1, 10, 100 more or less than a given number in different ways • Number line to 1,000 • Estimate on a number line to 1,000
Week 3	Place Value: • Compare numbers to 1,000 • Order numbers to 1,000 • Count in 50s
Week 4	Addition and Subtraction: • Apply number bonds within 10 • Add and subtract 1s • Add and subtract 10s • Add and subtract 100s • Spot the pattern
Week 5	Addition and Subtraction: • Add 1s across a 10 • Add 10s across a 100 • Subtract 1s across a 10 • Subtract 10s across a 100 • Make connections
Week 6	Addition and Subtraction: • Add two numbers (no exchange) • Subtract two numbers (no exchange) • Add two numbers (across a 10) • Add two numbers (across a 100) • Subtract two numbers (across a 10) • Subtract two numbers (across a 100)
Week 7	Addition and Subtraction: • Add 2 digit and 3 digit numbers • Subtract a 2 digit number from a 3 digit number • Complements to 100 • Estimate answers • Inverse operation
Week 8	Multiplication and Division: • Multiplication (describing equal groups) • Use arrays • Muliples of 2 • Multiples of 5 and 10 • Sharing and grouping

Week 9	Multiplication and Division: • Multiply by 3 and divide by 3 • The three times table • Divide by 3 and 4 • The 3 and 4 times table
Week 10	Multiplication and Division: • Multiply and divide by 8 • The 8 times table • The 2, 4 and 8 times table
Week 11	Money: • Pounds and pence • Convert ponds and pence
Week 12	Consolidation and Assessment

Year 3 – Spring MTP

**If the first week back in Spring term 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: • Multiples of 10 • Related calculations • Reasoning about multiplication • Multiply a 2-digit number by a 1-digit number (no exchange) • Multiply a 2-digit number by a 1-digit number (with exchange)
Week 2 *	Multiplication and Division: • Link multiplication and division • Divide a 2-digit number by a 1-digit number (no exchange) • Divide a 2-digit number by a 1-digit number (flexible partitioning) • Divide a 2-digit number by a 1-digit number (with remainders) • Scaling
Week 3	Measurement: • Measure length (m, cm, mm) • Metres, centimetres and millimetres • Equivalent lengths (metres and centimetres) • Equivalent lengths (centimetres and millimetres) • Compare lengths
Week 4	Measurement: • Add lengths • Subtract lengths • What is perimeter? • Measure perimeter • Calculate perimeter
Week 5	Fractions: • Understand the denominators of unit fractions • Compare and order unit fractions • Understand the numerators of non-unit fractions • Understand the whole
Week 6	Fractions: • Compare and order non-unit fractions • Fractions and scales • Fractions on a number line • Count in fractions on a number line
Week 7	Fractions: • Equivalent fractions on a number line • Equivalent fractions as bar models
Week 8	Mass and Capacity: • Use scales • Measure mass in grams • Measure mass in kilograms and grams • Equivalent masses (kilograms and grams)
Week 9	Mass and Capacity: • Compare mass • Add and subtract mass • Measure capacity and volume in millilitres • Measure capacity and volume in litres and millilitres

Week 10	Mass and Capacity: • Equivalent capacities and volumes (litres and millilitres) • Compare capacity and volume • Add and subtract capacity and volume

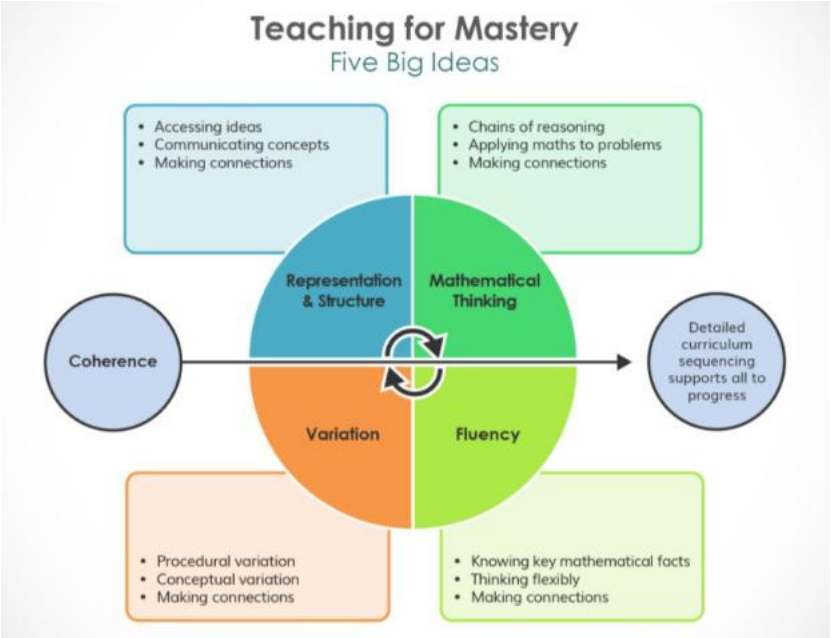
Year 3 – Summer MTP

	Main Focus & Independent work
Week 1	Fractions: • Add fractions • Subtract fractions • Partition the whole
Week 2	Fractions: • Unit fractions of a set of objects • Non-unit fractions of a set of objects • Reasoning with a set of objects
Week 3	Money: • Pounds and pence (recap) • Add money • Subtract money • Find change
Week 4	Time: • Roman numerals to 12 • Telling the time to 5 minutes • Telling the time to the minute • Read time on a digital clock • Using a.m. and p.m.
Week 5	Time: • Years, months and days • Days and hours • Hours and minutes (start and end time and duration)
Week 6	Time: • Hours, minutes and seconds • Solving problems with time
Week 7	Shape: • Turns and angles • Right angles in shapes • Compare angles • Measure and draw accurately • Horizontal, vertical, parallel and perpendicular
Week 8	Shape: • Recognise and describe 2D shapes • Draw polygons • Recognise and describe 3D shapes • Make 3D shapes
Week 9	Statistics: • Interpret pictograms • Draw pictograms • Interpret bar charts • Draw bar charts
Week 10	Statistics: • Collect and represent data • Two-way tables
Week 11	Consolidate and review
Week 12	Consolidate and review

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.