Our Lady of the Rosary RC Primary School

Maths Policy

Our Journey

Love God

Others First

Respect All

Date of Policy: Summer 2026

Date of Review: Summer 2028

This policy represents the agreed principles for Mathematics throughout the school. This policy has been agreed by governors within the school and all teachers representing Early Years, Key Stage 1 (Years 1 & 2) and Key Stage 2 (Years 3, 4, 5 & 6).

"Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject."
National Curriculum 2014

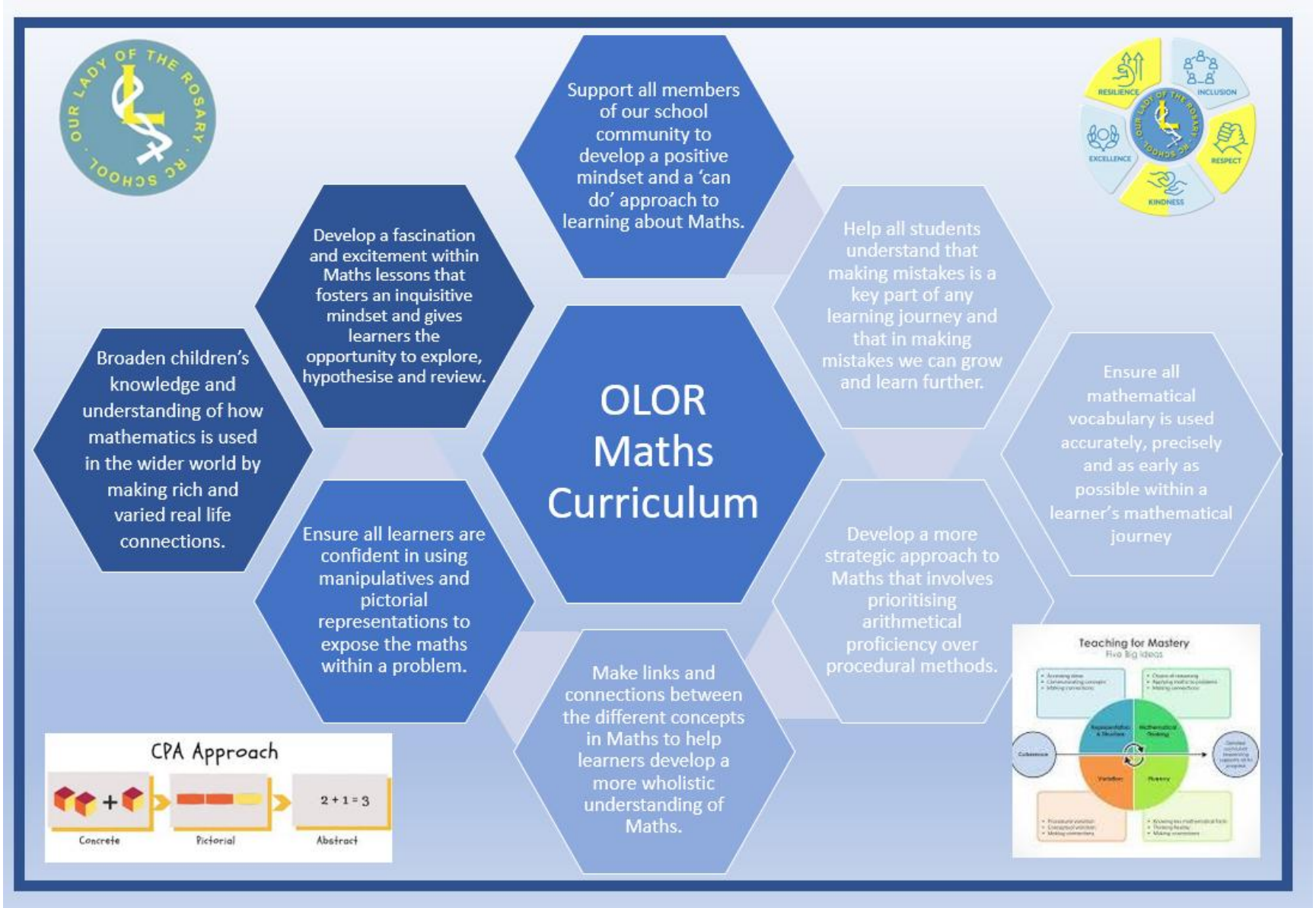
Our Lady of The Rosary Primary School Vision and Aims:

At Our Lady of the Rosary, we have adopted a mastery approach to teaching and learning in mathematics. At the centre of this approach is the belief that all pupils have the potential to succeed and become confident mathematicians. All children should have access to the same curriculum content and, rather than being extended with new content from other year groups, they should deepen their conceptual understanding of topics within their year group by reasoning and problem solving. Mastery is not just being able to memorise key facts and answer test questions quickly; instead, mastery involves knowing how and why the mathematics works and to have a conceptual understanding of the processes and fundamentals. It means being able to use mathematics knowledge in new and unfamiliar situations.

Our Lady of the Rosary Primary School aims to:

- Develop a fascination and excitement within Maths lessons that fosters an inquisitive mindset and gives learners the opportunity to explore, hypothesise and review.
- Support all members of our school community to develop a positive mindset and a 'can do' approach to learning about Maths. We understand that someone's mindset can have a large bearing on their learning and that a growth mindset to Maths will facilitate good learning.
- Help all students understand that making mistakes is a key part of any learning journey and that in making mistakes we can grow and learn further.
- Ensure all mathematical vocabulary is used accurately, precisely and as early as possible within a learner's mathematical journey to help develop clear conceptual understanding.
- Ensure all learners are confident in using manipulatives and pictorial representations to expose the maths within a problem. To also ensure that children are able to choose to use these independently to support their understanding.
- Make links and connections between the different concepts in Maths to help learners develop a more wholistic understanding of Maths.
- Help learners to articulate their reasoning to be able to fully explain their methodology, while at all times, valuing everyone's contributions and seeing different methods to solve the same problem.
- Develop a more strategic approach to Maths that involves prioritising arithmetical proficiency over procedural methods.
- Broaden children's knowledge and understanding of how mathematics is used in the wider world by making rich and varied real life connections.

Good learning takes place when pupils are given opportunities to solve problems by developing their understanding and making links between different areas of mathematics and applying skills. Good teaching enables good learning to take place. It involves creating an appropriate, supportive environment where pupils can respond to high levels of expectation and challenge and articulate their learning and understanding of concepts.



Mathematics Curriculum Planning

Mathematics is a core subject in the National Curriculum, and OLOR use the Primary Mathematics Curriculum (2014) as the basis for implementing the statutory requirements of the programme of study for Mathematics. We carry out curriculum planning in Mathematics in three phases (long-term, medium-term and short-term). The Primary Mathematics Curriculum (2014) gives a detailed outline of what we teach in the long term. Teachers in Key Stage 1 and 2 use the Primary Mathematics Curriculum (2014) to plan work to suit the year group they teach.

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

The school follows the White Rose Maths framework to enable teachers to develop medium-term Mathematics plans, which give details of the main teaching objectives for each term, defining what will be taught and when. Appendix 1 gives the overviews of which Mathematical concepts will be taught at certain points in the year and the progression of small steps within each unit.

Class teachers then complete a weekly plan for the teaching of Mathematics. These weekly plans list the specific learning objectives for each lesson, broken down from the end of year objective and giving details of how the lessons are to be taught. The class teacher keeps these individual plans.

To provide adequate time for developing key skills in fluency, reasoning and problem solving, each class teacher will provide at least five daily mathematics lessons per week. Additional mathematics may be taught within other subject lessons when appropriate, for example displaying data in Science.

Class teachers teach high quality maths lessons ensuring that there is emphasis on direct whole-class teaching, groups/partner work and independent work. We use a range of approaches (concrete, pictorial and abstract methods) following the White Rose scheme of work, teaching mathematical concepts through small steps. Staff teach and model correct mathematical language, which scaffolds children's reasoning and explanation skills – sentence stems are used to develop this.

The subject leader monitors this planning regularly.

Progression of skills

The teaching of Maths in OLOR is sequential and builds on previous learning. This policy gives an at-a-glance guide to how the OLOR Maths curriculum links to the Key Stage 1 and 2 national curriculum, and how it progresses through topics. In Appendix 3 this progression is laid out. In each of the major topic areas (Number, Measurement, Geometry and Statistics), the curriculum has been broken down into key areas. For each of these areas, you can then see which NC objectives are covered in that year, together with the term and block in which that objective is first met in the OLOR curriculum.

Mathematical Vocabulary

The use of accurate mathematical vocabulary is essential for children's understanding and communication of mathematical concepts. By developing confidence with key terms, pupils can better articulate their thinking, reason effectively, and build a strong foundation for future learning in mathematics. Appendix 2 provides an outline of where key mathematical vocabulary is introduced and developed throughout OLOR's Maths curriculum.

Assessment

At OLOR, our children's Maths skills are regularly assessed to ensure that teachers are aware of children that may not be secure with particular concepts.

1) Informal, formative assessments are made continually by questioning the children, observing and monitoring their work. These short-term assessments are closely related to the learning objectives for the lesson and help inform next steps within and across lessons within a unit of learning.
2) Periodic assessments take place at the end of a unit – we use White Rose Maths end of block assessments to check progress and understanding of content covered. This information also informs interventions and carefully tracks progress of children.
3) Summative assessment - this is the use of tests or more formal assessments to find out what children have learnt. The children are assessed summatively at the end of every term on all the concepts they will have covered within that term.
All children complete an age standardised test at the end of the academic year covering all the concepts within the year they have just completed.

Statutory Assessment Tests (SATs) are used for children in Year 2 and 6, plus children in Year 4 are also required to take a multiplication tables check (MTC) in the Summer Term. The purpose of the check is to determine whether pupils can fluently recall their times tables up to 12, which is essential for future success in mathematics.

A whole school tracking system is used to closely monitor children's progress throughout the school. Teacher assessments are made termly and are closely analysed to identify children working at greater depth or who are at risk, appropriate intervention is then put in place to close gaps.

Homework

Children receive one piece of Maths homework a week for pupils in KS1 and KS2. Homework is for each child to complete a test within the Schofield and Sims mental arithmetic book they are provided with. These books are linked to year group expectations. In addition, complete online games and challenges to aimed at improving fluency such as Times Tables Rockstars and Numbots.

Monitoring

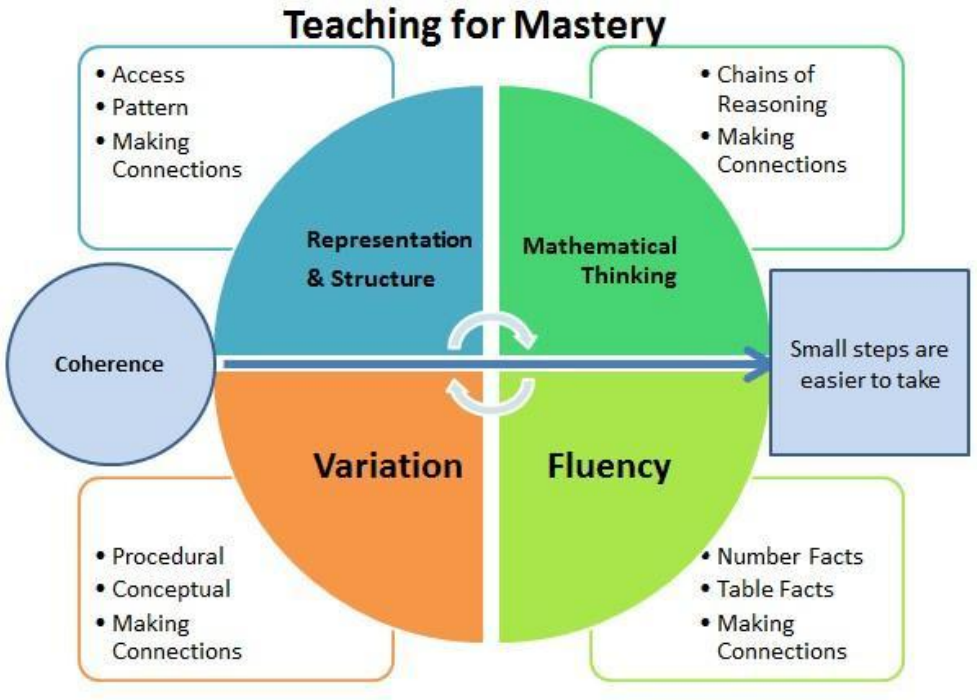
The Maths lead team are responsible for monitoring the standard of pupil's work, the quality of the teaching and evaluating impact. The work of the team involves supporting colleagues in the teaching of mathematics, being aware of current developments in the subject. The Maths lead provides a strategic lead and direction for the subject in the school so that it remains high profile.

The school leadership team (& maths team) will conduct evaluations of teaching and learning within Maths via:

- observing Maths lessons and making time for staff to observe the Maths lead and other teachers teach Maths
- termly review of Maths book to ensure standards within classes are high, that teachers are teaching the expected concepts and that children are making progress in lessons and across units of work.
- termly pupil progress meeting between teachers and the SLT. These meetings track the progress of every child within the school to ensure all are making progress and intervention is in place for those children requiring extra support.

What does Maths look like at OLOR?

Lessons are planned and delivered using the principles of Teaching for Mastery and tailored to each class's needs.



Fluency

Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics - NCETM

In the EYFS, the Development Matters non-statutory guidance is used to identify end points from Early Learning Goals. Early understanding of maths is developed using concrete resources, counting, number songs, developing number sense and recognising number patterns.

KS1 have embedded the Mastering Number programme to develop number sense. This ensures that there is a short daily burst on fluency in addition to the concepts being taught in Maths lessons. KS1 sessions focus primarily on addition and subtraction facts to 20 and is supported by '2 Minute Maths' and the associated flash cards.

In KS2, there is also daily focus on fluency. Classes may also use 2 Minute Maths, which is adapted to develop fluency skills in all operations but has a specific focus and strategy each week. Pupils are encouraged to use TTRS and Numbots at home and at school where appropriate. Battles between classes are used to encourage participation and Rock Status certificates reward effort and progress as pupils work through the programme. In the table below, fluency expectations, and how they are met in school and at home, are laid out.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fluency objectives	Count forward and back to 10 Number bonds to 5 Subitising to 5	Addition and subtraction facts to 20 Count in 2s, 5s, and 10s Doubles to 10 and corresponding halves	Addition and subtraction facts to 20 Multiplication and division facts for 2-, 5- and 10-times tables Identify odd and even	Addition and subtraction facts to 20 Multiplication and division facts for 3-, 4- and 8-times tables Revision of 2-, 5- and 10- times tables	Multiplication and division facts for 6-, 7-, 8-, 9, 11-, and 12-times tables Revision of 2-, 3-, 4-, 5-, 8- and 10-times tables	Revision of all times tables and associated division facts	Revision of all times tables and associated division facts
Toolkit: Additional Resources		2 minute Maths - twice a week	2 minute Maths - twice a week	Maths Hub multiplication and division books – twice a day	Maths Hub multiplication and division books – twice a day	Maths Hub multiplication and division books – twice a day	Maths Hub multiplication and division books – twice a day
Toolkit: Planning and Schemes	Nursery: WRM lessons – 4 times a week Reception: WRM lessons – 4 times a week	WRM lessons – 5 times a week Mastering Number Year 1 – 3 times a week	WRM lessons – 5 times a week Mastering Number Year 2 – 3 times a week	WRM lessons – 5 times a week	WRM lessons – 5 times a week Mastering Number Year 4 – 3 times a week	WRM lessons – 5 times a week Mastering Number Year 4 – 3 times a week	WRM lessons – 5 times a week
Additional Support	Reception: 1 Minute Maths – 10 minute a week	Numbots – 15 minutes a week	Numbots – 20 minutes a week	TTRS – 15 minutes a week	TTRS – 30 minutes a week in garage mode	TTRS – 30 minutes a week in garage mode	TTRS – 30 minutes a week in garage mode

Representation and Structure

Teachers introduce a concept using a concrete, pictorial, abstract approach and use representations as a means to show the structure of the maths being learned. Displays highlight the idea of 'Build it, draw it, write it, calculate it'. Often, the pictorial representation (e.g. place value grid) and abstract calculation (e.g. column addition) are used side by side until pupils can work confidently in the abstract.

All year groups are accustomed to bar models, part whole models, ten frames, place value charts, counters, Numicon, hundred squares and Dienes blocks and how they can be used. Teachers select the representation that best supports the learning of the concept.

Stem sentences are often used to highlight generalisations, for example 'ten tens are equal to one hundred'. They may also be used as a scaffold to support understanding. E.g. in fractions, 'The whole is divided into x (denominator) equal parts and we take x (numerator) parts.'

By following the White Rose small steps as a basis for learning, their SOL framework for each concept shows progression through the year groups, including which representations are used and where to start each concept to ensure there is an overlap without repeating the same lessons.

Mathematical Thinking

Mathematical thinking is central to deep and sustainable learning of mathematics. Taught ideas that are understood deeply are not just 'received' passively but worked on by the student. They need to be thought about, reasoned with and discussed. - NCETM

Lessons will often start with a challenge that lets pupils have a go themselves before the lesson supports their learning to solve the problem efficiently. Sometimes, there will be an 'Expert Groups' task, which might be a deepening task from the previous lessons, which gives all children chance to access the deeper learning but also allows the 'expert' pupils to lead the learning and verbalise their reasoning to others.

Throughout the lessons, there is a mixture of ping pong style teaching, which also allows pupils to work with a buddy 'Rally Coaching' and for them to have a go at some tasks independently before the main independent learning task.

Lessons are planned to highlight and draw out misconceptions; this may be with a character or with a statement to prove/disprove/explore, e.g. Always, Sometimes, Never. What's the same; what's different? True or False.

Mathematical thinking sessions allow pupils to work independently to apply their understanding. This prepares them for assessment style questions and allows children to show their reasoning and their knowledge flexibly to solve problems.

Coherence

Lessons are broken down into small, connected steps that gradually unfold the concept, providing access for all children and leading to a generalisation of the concept and the ability to apply the concept to a range of contexts. – NCETM

Teachers use the White Rose Maths long term plan to structure their teaching over the year. This has been supplemented by the DfE guidance and NCETM Materials to support teachers in prioritising learning to ensure that pupils are ready to progress at the end of the year.

Teachers spend time mapping out the learning sequence outlined in the White Rose long term plan using the small steps scheme of learning to identify the end points of pupils' learning and plan lessons accordingly (demonstrating horizon thinking).

Individual lessons are designed as a series of small steps based on the White Rose scheme of learning, tailored to the needs of the class. Opportunities to adapt teaching deepen and support learning are planned into the lessons, which are supplemented with appropriate representations and reasoning opportunities from the lesson design toolkit

Variation

Variation is twofold. It is firstly about how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and to develop deep and holistic understanding. It is also about the sequencing of the episodes, activities and exercises used within a lesson and follow up practice, paying attention to what is kept the same and what changes, to connect the mathematics and draw attention to mathematical relationships and structure. – NCETM

During the planning phase, teachers ensure that the way questions are presented draws pupils' attention to the key learning: all non-essential features are varied while the essential features stay the same. This supports pupils in identifying the key features of the concept and addresses misconceptions.

Numbers are chosen deliberately in questions to draw pupils' attention to the relationships between numbers, which in turn allows them to make generalisations about what they have learned. Teachers will often ask, 'What is the same; what is different?' and through the subsequent discussion, pupils spot patterns and make connections.

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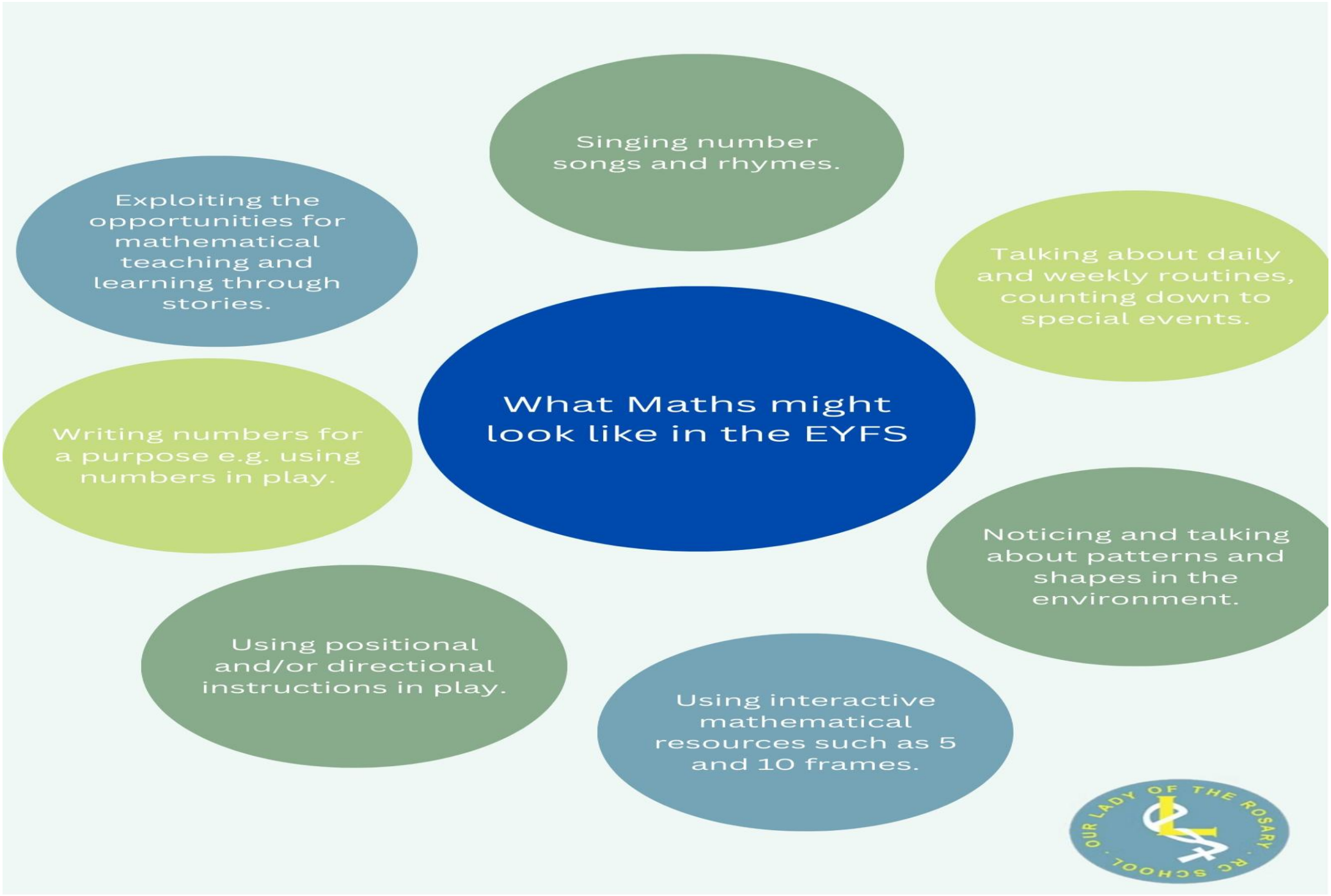
Small Steps

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What Maths might look like in the EYFS
Singing number songs and rhymes.
Exploiting the opportunities for mathematical teaching and learning through stories.
Talking about daily and weekly routines, counting down to special events.
Writing numbers for a purpose e.g. using numbers in play.
Noticing and talking about patterns and shapes in the environment.
Using positional and/or directional instructions in play.
Using interactive mathematical resources such as 5 and 10 frames.
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Appendix 1 – Overview of small steps

Nursery – Yearly Overview

Autumn Theme	Getting to know you	Colours and Matching	Sorting	Number 1	Number 2	Pattern	Consolidation
	Weeks 1-3	Week 4	Weeks 5-6	Week 7	Weeks 8 - 9	Weeks 10 - 11	Week 12
Objectives	-Build trusting relationships -Ensure children have good levels of well-being and involvement to be ready to learn.	-Exploring colours -Matching the same colours -Naming colours -Finding a matching pair -Exploring items that are the same and different	- Sort objects by colour -Sort objects by shape -Sort objects by size -Identifying sorting rules -Explaining what they notice	- Identifying the numeral 1 - Subitising 1 - Counting 1 -Developing 1-1 correspondence -Developing counting skill and technique	- Identifying the numeral 2 - Subitising 2 - Counting 12 -Developing 1-1 correspondence -Developing counting skill and technique	-Exploring AB colour patterns -Extending AB colour patterns -Copying AB movement patterns -Creating AB movement patterns -Fixing patterns	-Consolidating the numbers 1 and 2. - Counting to 1 and 2. -Subitising - Patterns -Sorting rules and colours

Spring Theme	Number 3	Number 4	Number 5	Consolidation	Number 6	Length and Height	Mass	Capacity	Consolidation
	Weeks 1-2	Weeks 3 - 4	Weeks 5 - 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Objectives	- Identifying the numeral 3 - Subitising 3 - Counting 123 -Developing 1-1 correspondence -Developing counting skill and technique	- Identifying the numeral 4 - Subitising 4 - Counting 1234 -Developing 1-1 correspondence -Developing counting skill and technique	- Identifying the numeral 5 - Subitising 5 - Counting 12345 -Developing 1-1 correspondence -Developing counting skill and technique	- Recap Week 1 – 6 to consolidate the numbers 1 – 5 and the prior learning linked to these numbers.	- Identifying the numeral 6 - Subitising 6 - Counting 123456 -Developing 1-1 correspondence -Developing counting skill and technique	- Introduction to length and height -Introduction to measurement related vocabulary	- Introduction to length and height - Introduction to measurement related vocabulary	- Introduction to capacity - Introduction to capacity related vocabulary	-Consolidating number 6 -Consolidating length -Consolidating weight -Consolidating capacity

Summer Theme	Sequencing	Positional Language	More than, fewer	2D Shape	3D shape	Consolidation and More or less	Number composition	What comes after	What comes before	Numbers to 5	Consolidation	On the move
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Objectives	-Learning the days of the week - Learning the routine -Sequencing the day and activities	- Learning to use positional language correctly. Understanding positional language	-Adding one more -Taking one away -Ordering numerals to 5 -Estimating	-Exploring 2D shapes -Naming 2D shapes - Using shapes to build pictures	-Exploring 3D shapes -Naming 3D shapes	-Comparing more and less - Counting amounts - Ordering numerals to 5	- Building and splitting numbers in different ways	-Children developing an in-depth understanding of which number comes next 1-5.	-Children developing an in-depth understanding of which number comes before 0-5.	Consolidating and securing the understanding of the numbers 1-5.	Consolidating prior knowledge	-Getting ready for Reception

Reception – Yearly Overview



Reception – Term 1 Small Steps

Reception | Autumn term | Block 1 – Match, sort and compare

Small steps

Step 1	Match objects
Step 2	Match pictures and objects
Step 3	Identify a set
Step 4	Sort objects to a type
Step 5	Explore sorting techniques
Step 6	Create sorting rules
Step 7	Compare amounts

Reception | Autumn term | Block 2 – Talk about measure and pattern

Small steps

Step 1	Compare size
Step 2	Compare mass
Step 3	Compare capacity
Step 4	Explore simple patterns
Step 5	Copy and continue simple patterns
Step 6	Create simple patterns

Reception | Autumn term | Block 3 – It's me 1, 2, 3

Small steps

Step 1	Find 1, 2 and 3
Step 2	Subitise 1, 2 and 3
Step 3	Represent 1, 2 and 3
Step 4	1 more
Step 5	1 less
Step 6	Composition of 1, 2 and 3

Reception | Autumn term | Block 4 – Circles and triangles

Small steps

Step 1	Identify and name circles and triangles
Step 2	Compare circles and triangles
Step 3	Shapes in the environment
Step 4	Describe position

Reception | Autumn term | Block 5 – 1, 2, 3, 4, 5

Small steps

Step 1	Find 4 and 5
Step 2	Subitise 4 and 5
Step 3	Represent 4 and 5
Step 4	1 more
Step 5	1 less
Step 6	Composition of 4 and 5
Step 7	Composition of 1–5

Reception | Autumn term | Block 6 – Shapes with 4 sides

Small steps

Step 1	Identify and name shapes with 4 sides
Step 2	Combine shapes with 4 sides
Step 3	Shapes in the environment
Step 4	My day and night

Reception – Term 2 Small Steps

Reception | Spring term | Block 1 – Alive in 5

Small steps

Step 1	Introduce zero
Step 2	Find 0 to 5
Step 3	Subitise 0 to 5
Step 4	Represent 0 to 5
Step 5	1 more
Step 6	1 less
Step 7	Composition
Step 8	Conceptual subitising to 5

Reception | Spring term | Block 2 – Mass and capacity

Small steps

Step 1	Compare mass
Step 2	Find a balance
Step 3	Explore capacity
Step 4	Compare capacity

Reception | Spring term | Block 3 – Growing 6, 7, 8

Small steps

Step 1	Find 6, 7 and 8
Step 2	Represent 6, 7 and 8
Step 3	1 more
Step 4	1 less
Step 5	Composition of 6, 7 and 8
Step 6	Make pairs – odd and even
Step 7	Double to 8 (find a double)
Step 8	Double to 8 (make a double)

Reception | Spring term | Block 3 – Growing 6, 7, 8

Small steps

Step 9	Combine two groups
Step 10	Conceptual subitising

Reception | Spring term | Block 4 – Length, height and time

Small steps

Step 1	Explore length
Step 2	Compare length
Step 3	Explore height
Step 4	Compare height
Step 5	Talk about time
Step 6	Order and sequence time

Reception | Spring term | Block 5 – Building 9 and 10

Small steps

Step 1	Find 9 and 10
Step 2	Compare numbers to 10
Step 3	Represent 9 and 10
Step 4	Conceptual subitising to 10
Step 5	1 more
Step 6	1 less
Step 7	Composition to 10
Step 8	Bonds to 10 (2 parts)

Reception | Spring term | Block 5 – Building 9 and 10

Small steps

Step 9	Make arrangements of 10
Step 10	Bonds to 10 (3 parts)
Step 11	Doubles to 10 (find a double)
Step 12	Doubles to 10 (make a double)
Step 13	Explore even and odd

Reception | Spring term | Block 6 – Explore 3-D shape

Small steps

Step 1	Recognise and name 3-D shapes
Step 2	Find 2-D shapes within 3-D shapes
Step 3	Use 3-D shapes for tasks
Step 4	3-D shapes in the environment
Step 5	Identify more complex patterns
Step 6	Copy and continue patterns
Step 7	Patterns in the environment

Reception – Term 3 Small Steps

Reception | Summer term | Block 1 – To 20 and beyond

Small steps

Step 1	Build numbers beyond 10 (10–13)
Step 2	Continue patterns beyond 10 (10–13)
Step 3	Build numbers beyond 10 (14–20)
Step 4	Continue patterns beyond 10 (14–20)
Step 5	Verbal counting beyond 20
Step 6	Verbal counting patterns

Reception | Summer term | Block 2 – How many now?

Small steps

Step 1	Add more
Step 2	How many did I add?
Step 3	Take away
Step 4	How many did I take away?

Reception | Summer term | Block 3 – Manipulate, compose and decompose

Small steps

Step 1	Select shapes for a purpose
Step 2	Rotate shapes
Step 3	Manipulate shapes
Step 4	Explain shape arrangements
Step 5	Compose shapes
Step 6	Decompose shapes
Step 7	Copy 2-D shape pictures
Step 8	Find 2-D shapes within 3-D shapes

Reception | Summer term | Block 4 – Sharing and grouping

Small steps

Step 1	Explore sharing
Step 2	Sharing
Step 3	Explore grouping
Step 4	Grouping
Step 5	Even and odd sharing
Step 6	Play with and build doubles

Reception | Summer term | Block 5 – Visualise, build and map

Small steps

- Step 1 Identify units of repeating patterns
- Step 2 Create own pattern rules
- Step 3 Explore own pattern rules
- Step 4 Replicate and build scenes and constructions
- Step 5 Visualise from different positions
- Step 6 Describe positions
- Step 7 Give instructions to build
- Step 8 Explore mapping

Reception | Summer term | Block 5 – Visualise, build and map

Small steps

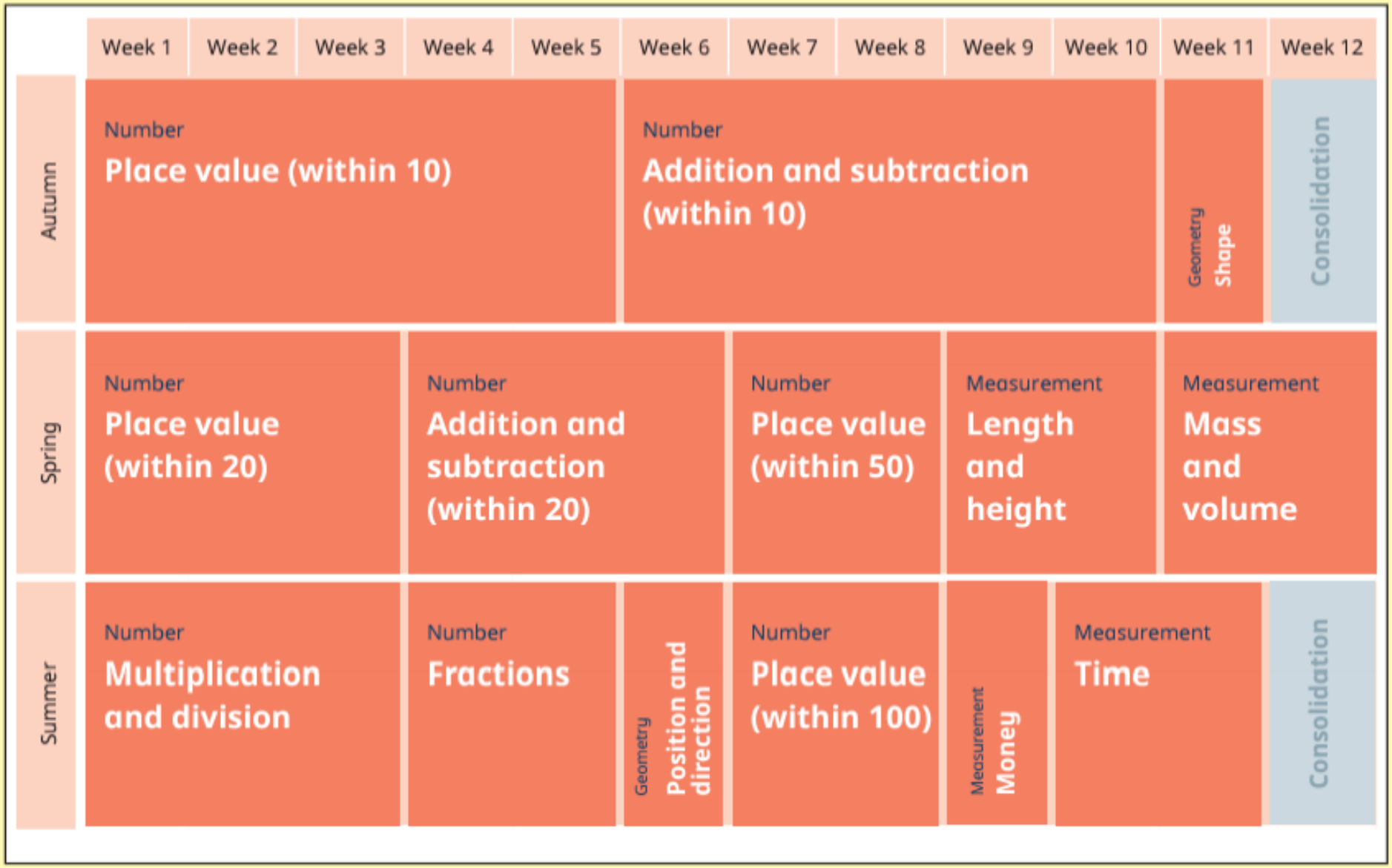
- Step 9 Represent maps with models
- Step 10 Create own maps from familiar places
- Step 11 Create own maps and plans from story situations

Reception | Summer term | Block 6 – Make connections

Small steps

- Step 1 Deepen understanding
- Step 2 Patterns and relationships

Year 1 – Yearly Overview



Year 1 – Term 1 Small Steps

Year 1 | Autumn term | Block 1 – Place value

Small steps

Step 1	Sort objects
Step 2	Count objects
Step 3	Count objects from a larger group
Step 4	Represent objects
Step 5	Recognise numbers as words
Step 6	Count on from any number
Step 7	1 more
Step 8	Count backwards within 10

Year 1 | Autumn term | Block 1 – Place value

Small steps

Step 9	1 less
Step 10	Compare groups by matching
Step 11	Fewer, more, same
Step 12	Less than, greater than, equal to
Step 13	Compare numbers
Step 14	Order objects and numbers
Step 15	The number line

Year 1 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 1	Introduce parts and wholes
Step 2	Part-whole model
Step 3	Write number sentences
Step 4	Fact families – addition facts
Step 5	Number bonds within 10
Step 6	Systematic number bonds within 10
Step 7	Number bonds to 10
Step 8	Addition – add together

Year 1 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 9	Addition – add more
Step 10	Addition problems
Step 11	Find a part
Step 12	Subtraction – find a part
Step 13	Fact families – the eight facts
Step 14	Subtraction – take away/cross out (How many left?)
Step 15	Subtraction – take away (How many left?)
Step 16	Subtraction on a number line

Year 1 – Term 1 Small Steps

Year 1 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 17	Add or subtract 1 or 2

Year 1 | Autumn term | Block 3 – Shape

Small steps

Step 1	Recognise and name 3-D shapes
Step 2	Sort 3-D shapes
Step 3	Recognise and name 2-D shapes
Step 4	Sort 2-D shapes
Step 5	Patterns with 2-D and 3-D shapes

Year 1 – Term 2 Small Steps

Year 1 | Spring term | Block 1 – Place value (within 20)

Small steps

Step 1	Count within 20
Step 2	Understand 10
Step 3	Understand 11, 12 and 13
Step 4	Understand 14, 15 and 16
Step 5	Understand 17, 18 and 19
Step 6	Understand 20
Step 7	1 more and 1 less
Step 8	The number line to 20

Year 1 | Spring term | Block 1 – Place value (within 20)

Small steps

Step 9	Use a number line to 20
Step 10	Estimate on a number line to 20
Step 11	Compare numbers to 20
Step 12	Order numbers to 20

Year 1 | Spring term | Block 2 – Addition and subtraction (within 20)

Small steps

Step 1	Add by counting on within 20
Step 2	Add ones using number bonds
Step 3	Find and make number bonds to 20
Step 4	Doubles
Step 5	Near doubles
Step 6	Subtract ones using number bonds
Step 7	Subtraction – counting back
Step 8	Subtraction – finding the difference

Year 1 | Spring term | Block 2 – Addition and subtraction (within 20)

Small steps

Step 9	Related facts
Step 10	Missing number problems

Year 1 – Term 2 Small Steps

Year 1 | Spring term | Block 3 – Place value (within 50)

Small steps

Step 1	Count from 20 to 50
Step 2	20, 30, 40 and 50
Step 3	Count by making groups of tens
Step 4	Groups of tens and ones
Step 5	Partition into tens and ones
Step 6	The number line to 50
Step 7	Estimate on a number line to 50
Step 8	1 more, 1 less

Year 1 | Spring term | Block 4 – Length and height

Small steps

Step 1	Compare lengths and heights
Step 2	Measure length using objects
Step 3	Measure length in centimetres

Year 1 | Spring term | Block 5 – Mass and volume

Small steps

Step 1	Heavier and lighter
Step 2	Measure mass
Step 3	Compare mass
Step 4	Full and empty
Step 5	Compare volume
Step 6	Measure capacity
Step 7	Compare capacity

Year 1 – Term 3 Small Steps

Year 1 | Summer term | Block 1 – Multiplication and division

Small steps

Step 1	Count in 2s
Step 2	Count in 10s
Step 3	Count in 5s
Step 4	Recognise equal groups
Step 5	Add equal groups
Step 6	Make arrays
Step 7	Make doubles
Step 8	Make equal groups – grouping

Year 1 | Summer term | Block 1 – Multiplication and division

Small steps

Step 9	Make equal groups – sharing

Year 1 | Summer term | Block 2 – Fractions

Small steps

Step 1	Recognise a half of an object or a shape
Step 2	Find a half of an object or a shape
Step 3	Recognise a half of a quantity
Step 4	Find a half of a quantity
Step 5	Recognise a quarter of an object or a shape
Step 6	Find a quarter of an object or a shape
Step 7	Recognise a quarter of a quantity
Step 8	Find a quarter of a quantity

Year 1 | Summer term | Block 3 – Position and direction

Small steps

Step 1	Describe turns
Step 2	Describe position – left and right
Step 3	Describe position – forwards and backwards
Step 4	Describe position – above and below
Step 5	Ordinal numbers

Year 1 – Term 3 Small Steps

Year 1 | Summer term | Block 4 – Place value (within 100)

Small steps

Step 1	Count from 50 to 100
Step 2	Tens to 100
Step 3	Partition into tens and ones
Step 4	The number line to 100
Step 5	1 more, 1 less
Step 6	Compare numbers with the same number of tens
Step 7	Compare any two numbers

Year 1 | Summer term | Block 5 – Money

Small steps

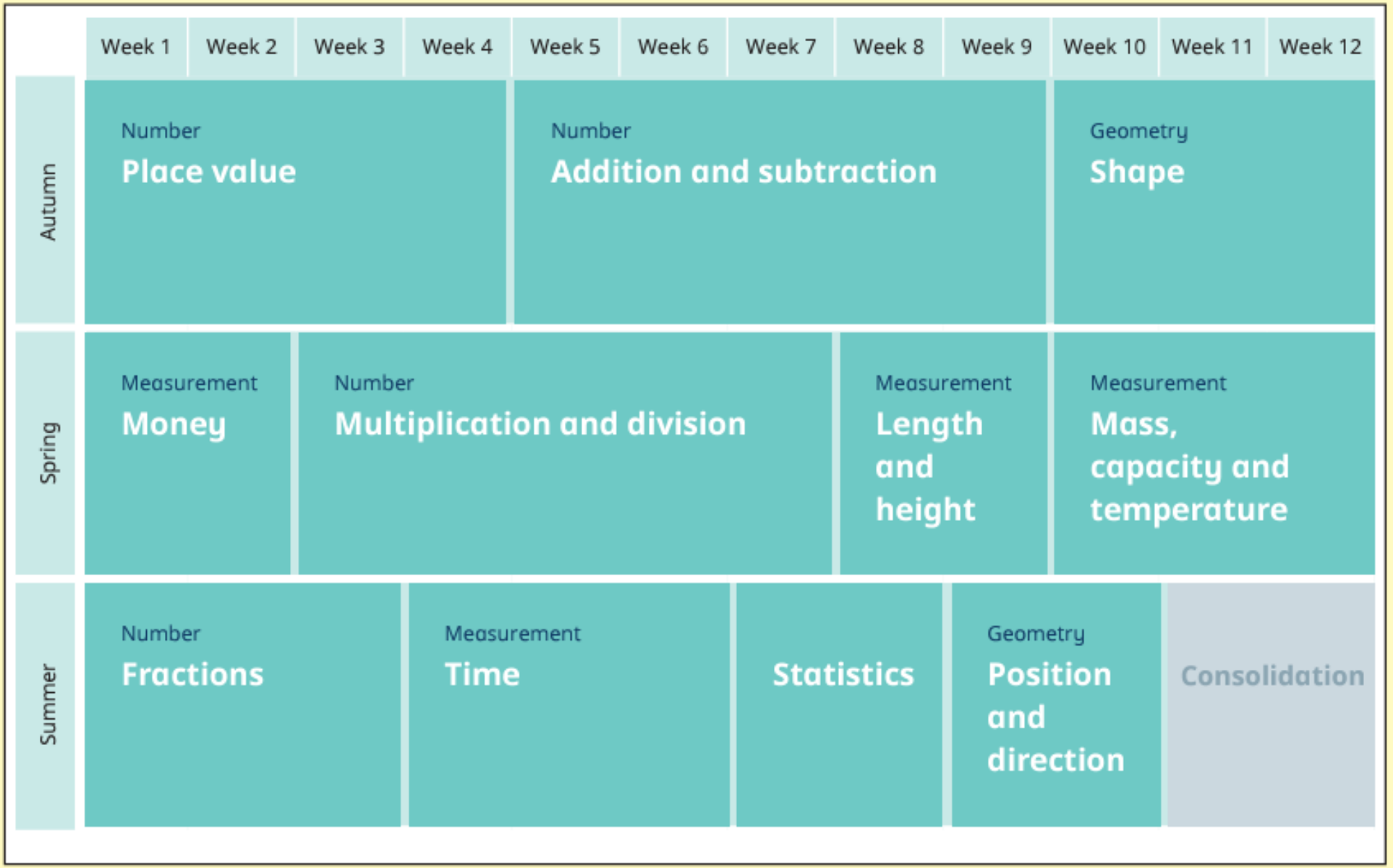
Step 1	Unitising
Step 2	Recognise coins
Step 3	Recognise notes
Step 4	Count in coins

Year 1 | Summer term | Block 6 – Time

Small steps

Step 1	Before and after
Step 2	Days of the week
Step 3	Months of the year
Step 4	Hours, minutes and seconds
Step 5	Tell the time to the hour
Step 6	Tell the time to the half hour

Year 2 – Yearly Overview



Year 2 – Term 1 Small Steps

Year 2 | Autumn term | Block 1 – Place value

Small steps

Step 1	Numbers to 20
Step 2	Count objects to 100 by making 10s
Step 3	Recognise tens and ones
Step 4	Use a place value chart
Step 5	Partition numbers to 100
Step 6	Write numbers to 100 in words
Step 7	Flexibly partition numbers to 100
Step 8	Write numbers to 100 in expanded form

Year 2 | Autumn term | Block 1 – Place value

Small steps

Step 9	10s on the number line to 100
Step 10	10s and 1s on the number line to 100
Step 11	Estimate numbers on a number line
Step 12	Compare objects
Step 13	Compare numbers
Step 14	Order objects and numbers
Step 15	Count in 2s, 5s and 10s
Step 16	Count in 3s

Year 2 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 1	Bonds to 10
Step 2	Fact families - addition and subtraction bonds within 20
Step 3	Related facts
Step 4	Bonds to 100 (tens)
Step 5	Add and subtract 1s
Step 6	Add by making 10
Step 7	Add three 1-digit numbers
Step 8	Add to the next 10

Year 2 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 9	Add across a 10
Step 10	Subtract across 10
Step 11	Subtract from a 10
Step 12	Subtract a 1-digit number from a 2-digit number (across a 10)
Step 13	10 more, 10 less
Step 14	Add and subtract 10s
Step 15	Add two 2-digit numbers (not across a 10)
Step 16	Add two 2-digit numbers (across a 10)

Year 2 – Term 1 Small Steps

Year 2 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 17	Subtract two 2-digit numbers (not across a 10)
Step 18	Subtract two 2-digit numbers (across a 10)
Step 19	Mixed addition and subtraction
Step 20	Compare number sentences
Step 21	Missing number problems

Year 2 | Autumn term | Block 3 – Shape

Small steps

Step 1	Recognise 2-D and 3-D shapes
Step 2	Count sides on 2-D shapes
Step 3	Count vertices on 2-D shapes
Step 4	Draw 2-D shapes
Step 5	Lines of symmetry on shapes
Step 6	Use lines of symmetry to complete shapes
Step 7	Sort 2-D shapes
Step 8	Count faces on 3-D shapes

Year 2 | Autumn term | Block 3 – Shape

Small steps

Step 9	Count edges on 3-D shapes
Step 10	Count vertices on 3-D shapes
Step 11	Sort 3-D shapes
Step 12	Make patterns with 2-D and 3-D shapes

Year 2 – Term 2 Small Steps

Year 2 | Spring term | Block 1 – Money

Small steps

Step 1	Count money – pence
Step 2	Count money – pounds (notes and coins)
Step 3	Count money – pounds and pence
Step 4	Choose notes and coins
Step 5	Make the same amount
Step 6	Compare amounts of money
Step 7	Calculate with money
Step 8	Make a pound

Year 2 | Spring term | Block 1 – Money

Small steps

Step 9	Find change
Step 10	Two-step problems

Year 2 | Spring term | Block 2 – Multiplication and division

Small steps

Step 1	Recognise equal groups
Step 2	Make equal groups
Step 3	Add equal groups
Step 4	Introduce the multiplication symbol
Step 5	Multiplication sentences
Step 6	Use arrays
Step 7	Make equal groups – grouping
Step 8	Make equal groups – sharing

Year 2 | Spring term | Block 2 – Multiplication and division

Small steps

Step 9	The 2 times-table
Step 10	Divide by 2
Step 11	Doubling and halving
Step 12	Odd and even numbers
Step 13	The 10 times-table
Step 14	Divide by 10
Step 15	The 5 times-table
Step 16	Divide by 5

Year 2 – Term 2 Small Steps

Year 2 | Spring term | Block 2 – Multiplication and division

Small steps

Step 17	The 5 and 10 times-tables

Year 2 | Spring term | Block 3 – Length and height

Small steps

Step 1	Measure in centimetres
Step 2	Measure in metres
Step 3	Compare lengths and heights
Step 4	Order lengths and heights
Step 5	Four operations with lengths and heights

Year 2 | Spring term | Block 4 – Mass, capacity and temperature

Small steps

Step 1	Compare mass
Step 2	Measure in grams
Step 3	Measure in kilograms
Step 4	Four operations with mass
Step 5	Compare volume and capacity
Step 6	Measure in millilitres
Step 7	Measure in litres
Step 8	Four operations with volume and capacity

Year 2 | Spring term | Block 4 – Mass, capacity and temperature

Small steps

Step 9	Temperature

Year 2 – Term 3 Small Steps

Year 2 | Summer term | Block 1 – Fractions

Small steps

Step 1	Introduction to parts and whole
Step 2	Equal and unequal parts
Step 3	Recognise a half
Step 4	Find a half
Step 5	Recognise a quarter
Step 6	Find a quarter
Step 7	Recognise a third
Step 8	Find a third

Year 2 | Summer term | Block 1 – Fractions

Small steps

Step 9	Find the whole
Step 10	Unit fractions
Step 11	Non-unit fractions
Step 12	Recognise the equivalence of a half and two-quarters
Step 13	Recognise three-quarters
Step 14	Find three-quarters
Step 15	Count in fractions up to a whole

Year 2 | Summer term | Block 2 – Time

Small steps

Step 1	O'clock and half past
Step 2	Quarter past and quarter to
Step 3	Tell the time past the hour
Step 4	Tell the time to the hour
Step 5	Tell the time to 5 minutes
Step 6	Minutes in an hour
Step 7	Hours in a day

Year 2 | Summer term | Block 3 – Statistics

Small steps

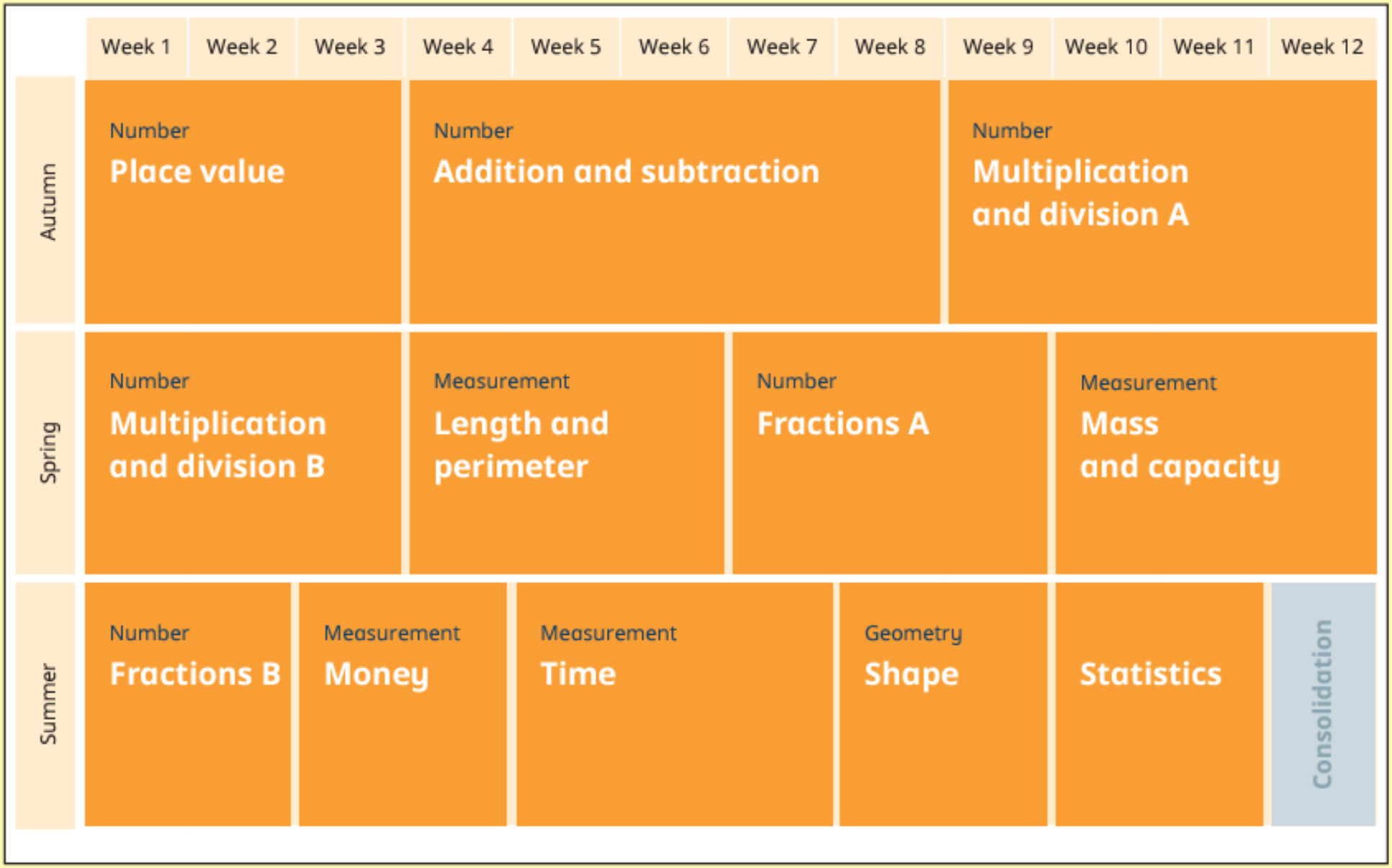
Step 1	Make tally charts
Step 2	Tables
Step 3	Block diagrams
Step 4	Draw pictograms (1–1)
Step 5	Interpret pictograms (1–1)
Step 6	Draw pictograms (2, 5 and 10)
Step 7	Interpret pictograms (2, 5 and 10)

Year 2 | Summer term | Block 4 – Position and direction

Small steps

Step 1	Language of position
Step 2	Describe movement
Step 3	Describe turns
Step 4	Describe movement and turns
Step 5	Shape patterns with turns

Year 3 – Yearly Overview



Year 3 – Term 1 Small Steps

Year 3 | Autumn term | Block 1 – Place value

Small steps

Step 1	Represent numbers to 100
Step 2	Partition numbers to 100
Step 3	Number line to 100
Step 4	Hundreds
Step 5	Represent numbers to 1,000
Step 6	Partition numbers to 1,000
Step 7	Flexible partitioning of numbers to 1,000
Step 8	Hundreds, tens and ones

Year 3 | Autumn term | Block 1 – Place value

Small steps

Step 9	Find 1, 10 or 100 more or less
Step 10	Number line to 1,000
Step 11	Estimate on a number line to 1,000
Step 12	Compare numbers to 1,000
Step 13	Order numbers to 1,000
Step 14	Count in 50s

Year 3 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 1	Apply number bonds within 10
Step 2	Add and subtract 1s
Step 3	Add and subtract 10s
Step 4	Add and subtract 100s
Step 5	Spot the pattern
Step 6	Add 1s across a 10
Step 7	Add 10s across a 100
Step 8	Subtract 1s across a 10

Year 3 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 9	Subtract 10s across a 100
Step 10	Make connections
Step 11	Add two numbers (no exchange)
Step 12	Subtract two numbers (no exchange)
Step 13	Add two numbers (across a 10)
Step 14	Add two numbers (across a 100)
Step 15	Subtract two numbers (across a 10)
Step 16	Subtract two numbers (across a 100)

Year 3 – Term 1 Small Steps

Year 3 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 17	Add 2-digit and 3-digit numbers
Step 18	Subtract a 2-digit number from a 3-digit number
Step 19	Complements to 100
Step 20	Estimate answers
Step 21	Inverse operations
Step 22	Make decisions

Year 3 | Autumn term | Block 3 – Multiplication and division A

Small steps

Step 1	Multiplication – equal groups
Step 2	Use arrays
Step 3	Multiples of 2
Step 4	Multiples of 5 and 10
Step 5	Sharing and grouping
Step 6	Multiply by 3
Step 7	Divide by 3
Step 8	The 3 times-table

Year 3 | Autumn term | Block 3 – Multiplication and division A

Small steps

Step 9	Multiply by 4
Step 10	Divide by 4
Step 11	The 4 times-table
Step 12	Multiply by 8
Step 13	Divide by 8
Step 14	The 8 times-table
Step 15	The 2, 4 and 8 times-tables

Year 3 – Term 2 Small Steps

Year 3 | Spring term | Block 1 – Multiplication and division B

Small steps

Step 1	Multiples of 10
Step 2	Related calculations
Step 3	Reasoning about multiplication
Step 4	Multiply a 2-digit number by a 1-digit number – no exchange
Step 5	Multiply a 2-digit number by a 1-digit number – with exchange
Step 6	Link multiplication and division
Step 7	Divide a 2-digit number by a 1-digit number – no exchange
Step 8	Divide a 2-digit number by a 1-digit number – flexible partitioning

Year 3 | Spring term | Block 1 – Multiplication and division B

Small steps

Step 9	Divide a 2-digit number by a 1-digit number – with remainders
Step 10	Scaling
Step 11	How many ways?

Year 3 | Spring term | Block 2 – Length and perimeter

Small steps

Step 1	Measure in metres and centimetres
Step 2	Measure in millimetres
Step 3	Measure in centimetres and millimetres
Step 4	Metres, centimetres and millimetres
Step 5	Equivalent lengths (metres and centimetres)
Step 6	Equivalent lengths (centimetres and millimetres)
Step 7	Compare lengths
Step 8	Add lengths

Year 3 | Spring term | Block 2 – Length and perimeter

Small steps

Step 9	Subtract lengths
Step 10	What is perimeter?
Step 11	Measure perimeter
Step 12	Calculate perimeter

Year 3 – Term 2 Small Steps

Year 3 | Spring term | Block 3 – Fractions A

Small steps

Step 1	Understand the denominators of unit fractions
Step 2	Compare and order unit fractions
Step 3	Understand the numerators of non-unit fractions
Step 4	Understand the whole
Step 5	Compare and order non-unit fractions
Step 6	Fractions and scales
Step 7	Fractions on a number line
Step 8	Count in fractions on a number line

Year 3 | Spring term | Block 3 – Fractions A

Small steps

Step 9	Equivalent fractions on a number line
Step 10	Equivalent fractions as bar models

Year 3 | Spring term | Block 4 – Mass and capacity

Small steps

Step 1	Use scales
Step 2	Measure mass in grams
Step 3	Measure mass in kilograms and grams
Step 4	Equivalent masses (kilograms and grams)
Step 5	Compare mass
Step 6	Add and subtract mass
Step 7	Measure capacity and volume in millilitres
Step 8	Measure capacity and volume in litres and millilitres

Year 3 | Spring term | Block 4 – Mass and capacity

Small steps

Step 9	Equivalent capacities and volumes (litres and millilitres)
Step 10	Compare capacity and volume
Step 11	Add and subtract capacity and volume

Year 3 – Term 3 Small Steps

Year 3 | Summer term | Block 1 – Fractions B

Small steps

Step 1	Add fractions
Step 2	Subtract fractions
Step 3	Partition the whole
Step 4	Unit fractions of a set of objects
Step 5	Non-unit fractions of a set of objects
Step 6	Reasoning with fractions of an amount

Year 3 | Summer term | Block 2 – Money

Small steps

Step 1	Pounds and pence
Step 2	Convert pounds and pence
Step 3	Add money
Step 4	Subtract money
Step 5	Find change

Year 3 | Summer term | Block 3 – Time

Small steps

Step 1	Roman numerals to 12
Step 2	Tell the time to 5 minutes
Step 3	Tell the time to the minute
Step 4	Read time on a digital clock
Step 5	Use am and pm
Step 6	Years, months and days
Step 7	Days and hours
Step 8	Hours and minutes – use start and end times

Year 3 | Summer term | Block 3 – Time

Small steps

Step 9	Hours and minutes - use durations
Step 10	Minutes and seconds
Step 11	Units of time
Step 12	Solve problems with time

Year 3 – Term 3 Small Steps

Year 3 | Summer term | Block 4 – Shape

Small steps

Step 1	Turns and angles
Step 2	Right angles
Step 3	Compare angles
Step 4	Measure and draw accurately
Step 5	Horizontal and vertical
Step 6	Parallel and perpendicular
Step 7	Recognise and describe 2-D shapes
Step 8	Draw polygons

Year 3 | Summer term | Block 4 – Shape

Small steps

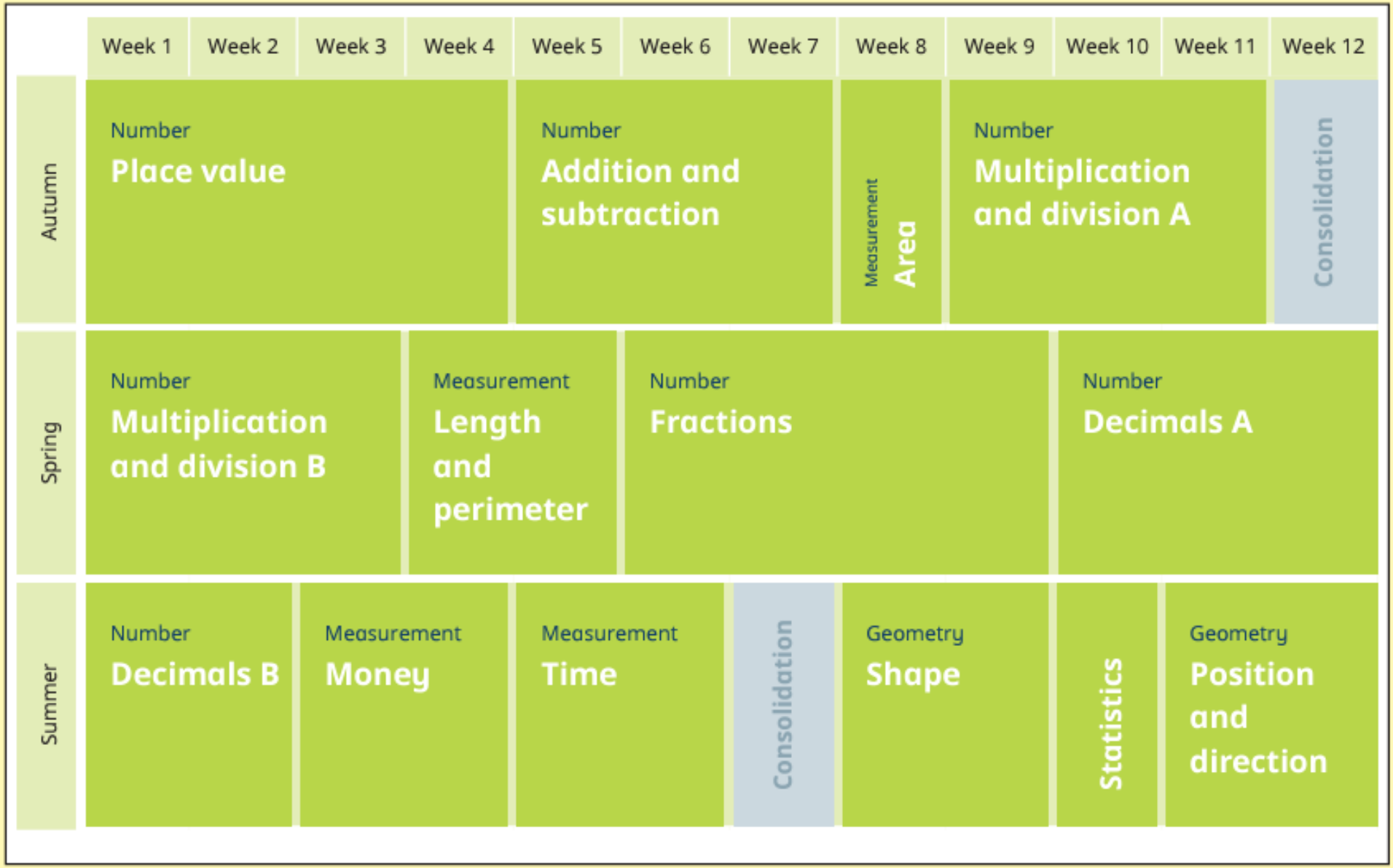
Step 9	Recognise and describe 3-D shapes
Step 10	Make 3-D shapes

Year 3 | Summer term | Block 5 – Statistics

Small steps

Step 1	Interpret pictograms
Step 2	Draw pictograms
Step 3	Interpret bar charts
Step 4	Draw bar charts
Step 5	Collect and represent data
Step 6	Two-way tables

Year 4 – Yearly Overview



Year 4 – Term 1 Small Steps

Year 4 | Autumn term | Block 1 – Place value

Small steps

Step 1	Represent numbers to 1,000
Step 2	Partition numbers to 1,000
Step 3	Number line to 1,000
Step 4	Thousands
Step 5	Represent numbers to 10,000
Step 6	Partition numbers to 10,000
Step 7	Flexible partitioning of numbers to 10,000
Step 8	Find 1, 10, 100, 1,000 more or less

Year 4 | Autumn term | Block 1 – Place value

Small steps

Step 9	Number line to 10,000
Step 10	Estimate on a number line to 10,000
Step 11	Compare numbers to 10,000
Step 12	Order numbers to 10,000
Step 13	Roman numerals
Step 14	Round to the nearest 10
Step 15	Round to the nearest 100
Step 16	Round to the nearest 1,000

Year 4 | Autumn term | Block 1 – Place value

Small steps

Step 17	Round to the nearest 10, 100 or 1,000

Year 4 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 1	Add and subtract 1s, 10s, 100s and 1,000s
Step 2	Add up to two 4-digit numbers – no exchange
Step 3	Add two 4-digit numbers – one exchange
Step 4	Add two 4-digit numbers – more than one exchange
Step 5	Subtract two 4-digit numbers – no exchange
Step 6	Subtract two 4-digit numbers – one exchange
Step 7	Subtract two 4-digit numbers – more than one exchange
Step 8	Efficient subtraction

Year 4 – Term 1 Small Steps

Year 4 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 9	Estimate answers
Step 10	Checking strategies

Year 4 | Autumn term | Block 3 – Area

Small steps

Step 1	What is area?
Step 2	Count squares
Step 3	Make shapes
Step 4	Compare areas

Year 4 | Autumn term | Block 4 – Multiplication and division A

Small steps

Step 1	Multiples of 3
Step 2	Multiply and divide by 6
Step 3	6 times-table and division facts
Step 4	Multiply and divide by 9
Step 5	9 times-table and division facts
Step 6	The 3, 6 and 9 times-tables
Step 7	Multiply and divide by 7
Step 8	7 times-table and division facts

Year 4 | Autumn term | Block 4 – Multiplication and division A

Small steps

Step 9	11 times-table and division facts
Step 10	12 times-table and division facts
Step 11	Multiply by 1 and 0
Step 12	Divide a number by 1 and itself
Step 13	Multiply three numbers

Year 4 – Term 2 Small Steps

Year 4 | Spring term | Block 1 – Multiplication and division B

Small steps

Step 1	Factor pairs
Step 2	Use factor pairs
Step 3	Multiply by 10
Step 4	Multiply by 100
Step 5	Divide by 10
Step 6	Divide by 100
Step 7	Related facts – multiplication and division
Step 8	Informal written methods for multiplication

Year 4 | Spring term | Block 1 – Multiplication and division B

Small steps

Step 9	Multiply a 2-digit number by a 1-digit number
Step 10	Multiply a 3-digit number by a 1-digit number
Step 11	Divide a 2-digit number by a 1-digit number (1)
Step 12	Divide a 2-digit number by a 1-digit number (2)
Step 13	Divide a 3-digit number by a 1-digit number
Step 14	Correspondence problems
Step 15	Efficient multiplication

Year 4 | Spring term | Block 2 – Length and perimeter

Small steps

Step 1	Measure in kilometres and metres
Step 2	Equivalent lengths (kilometres and metres)
Step 3	Perimeter on a grid
Step 4	Perimeter of a rectangle
Step 5	Perimeter of rectilinear shapes
Step 6	Find missing lengths in rectilinear shapes
Step 7	Calculate perimeter of rectilinear shapes
Step 8	Perimeter of regular polygons

Year 4 | Spring term | Block 2 – Length and perimeter

Small steps

Step 9	Perimeter of polygons

Year 4 – Term 2 Small Steps

Year 4 | Spring term | Block 3 – Fractions

Small steps

Step 1	Understand the whole
Step 2	Count beyond 1
Step 3	Partition a mixed number
Step 4	Number lines with mixed numbers
Step 5	Compare and order mixed numbers
Step 6	Understand improper fractions
Step 7	Convert mixed numbers to improper fractions
Step 8	Convert improper fractions to mixed numbers

Year 4 | Spring term | Block 3 – Fractions

Small steps

Step 9	Equivalent fractions on a number line
Step 10	Equivalent fraction families
Step 11	Add two or more fractions
Step 12	Add fractions and mixed numbers
Step 13	Subtract two fractions
Step 14	Subtract from whole amounts
Step 15	Subtract from mixed numbers

Year 4 | Spring term | Block 4 – Decimals A

Small steps

Step 1	Tenths as fractions
Step 2	Tenths as decimals
Step 3	Tenths on a place value chart
Step 4	Tenths on a number line
Step 5	Divide a 1-digit number by 10
Step 6	Divide a 2-digit number by 10
Step 7	Hundredths as fractions
Step 8	Hundredths as decimals

Year 4 | Spring term | Block 4 – Decimals A

Small steps

Step 9	Hundredths on a place value chart
Step 10	Divide a 1- or 2-digit number by 100

Year 4 – Term 3 Small Steps

Year 4 | Summer term | Block 1 – Decimals B

Small steps

Step 1	Make a whole with tenths
Step 2	Make a whole with hundredths
Step 3	Partition decimals
Step 4	Flexibly partition decimals
Step 5	Compare decimals
Step 6	Order decimals
Step 7	Round to the nearest whole number
Step 8	Halves and quarters as decimals

Year 4 | Summer term | Block 2 – Money

Small steps

Step 1	Write money using decimals
Step 2	Convert between pounds and pence
Step 3	Compare amounts of money
Step 4	Estimate with money
Step 5	Calculate with money
Step 6	Solve problems with money

Year 4 | Summer term | Block 3 – Time

Small steps

Step 1	Years, months, weeks and days
Step 2	Hours, minutes and seconds
Step 3	Convert between analogue and digital times
Step 4	Convert to the 24-hour clock
Step 5	Convert from the 24-hour clock

Year 4 | Summer term | Block 4 – Shape

Small steps

Step 1	Understand angles as turns
Step 2	Identify angles
Step 3	Compare and order angles
Step 4	Triangles
Step 5	Quadrilaterals
Step 6	Polygons
Step 7	Lines of symmetry
Step 8	Complete a symmetric figure

Year 4 – Term 3 Small Steps

Year 4 | Summer term | Block 5 – Statistics

Small steps

Step 1	Interpret charts
Step 2	Comparison, sum and difference
Step 3	Interpret line graphs
Step 4	Draw line graphs

Year 4 | Summer term | Block 6 – Position and direction

Small steps

Step 1	Describe position using coordinates
Step 2	Plot coordinates
Step 3	Draw 2-D shapes on a grid
Step 4	Translate on a grid
Step 5	Describe translation on a grid

Year 5 – Yearly Overview

	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	Number **Place value**			Number **Addition and subtraction**		Number **Multiplication and division A**			Number **Fractions A**			
Spring	Number **Multiplication and division B**			Number **Fractions B**		Number **Decimals and percentages**			Measurement **Perimeter and area**		Statistics	
Summer	Geometry **Shape**			Geometry **Position and direction**		Number **Decimals**			Number **Negative numbers**	Measurement **Converting units**		Measurement **Volume**

Year 5 – Term 1 Small Steps

Year 5 | Autumn term | Block 1 – Place value

Small steps

Step 1	Roman numerals to 1,000
Step 2	Numbers to 10,000
Step 3	Numbers to 100,000
Step 4	Numbers to 1,000,000
Step 5	Read and write numbers to 1,000,000
Step 6	Powers of 10
Step 7	10/100/1,000/10,000/100,000 more or less
Step 8	Partition numbers to 1,000,000

Year 5 | Autumn term | Block 1 – Place value

Small steps

Step 9	Number line to 1,000,000
Step 10	Compare and order numbers to 100,000
Step 11	Compare and order numbers to 1,000,000
Step 12	Round to the nearest 10, 100 or 1,000
Step 13	Round within 100,000
Step 14	Round within 1,000,000

Year 5 | Autumn term | Block 2 – Addition and subtraction

Small steps

Step 1	Mental strategies
Step 2	Add whole numbers with more than four digits
Step 3	Subtract whole numbers with more than four digits
Step 4	Round to check answers
Step 5	Inverse operations (addition and subtraction)
Step 6	Multi-step addition and subtraction problems
Step 7	Compare calculations
Step 8	Find missing numbers

Year 5 | Autumn term | Block 3 – Multiplication and division A

Small steps

Step 1	Multiples
Step 2	Common multiples
Step 3	Factors
Step 4	Common factors
Step 5	Prime numbers
Step 6	Square numbers
Step 7	Cube numbers
Step 8	Multiply by 10, 100 and 1,000

Year 5 – Term 1 Small Steps

Year 5 | Autumn term | Block 3 – Multiplication and division A

Small steps

Step 9	Divide by 10, 100 and 1,000
Step 10	Multiples of 10, 100 and 1,000

Year 5 | Autumn term | Block 4 – Fractions A

Small steps

Step 1	Find fractions equivalent to a unit fraction
Step 2	Find fractions equivalent to a non-unit fraction
Step 3	Recognise equivalent fractions
Step 4	Convert improper fractions to mixed numbers
Step 5	Convert mixed numbers to improper fractions
Step 6	Compare fractions less than 1
Step 7	Order fractions less than 1
Step 8	Compare and order fractions greater than 1

Year 5 | Autumn term | Block 4 – Fractions A

Small steps

Step 9	Add and subtract fractions with the same denominator
Step 10	Add fractions within 1
Step 11	Add fractions with total greater than 1
Step 12	Add to a mixed number
Step 13	Add two mixed numbers
Step 14	Subtract fractions
Step 15	Subtract from a mixed number
Step 16	Subtract from a mixed number – breaking the whole

Year 5 | Autumn term | Block 4 – Fractions A

Small steps

Step 17	Subtract two mixed numbers

Year 5 – Term 2 Small Steps

Year 5 | Spring term | Block 1 – Multiplication and division B

Small steps

Step 1	Multiply up to a 4-digit number by a 1-digit number
Step 2	Multiply a 2-digit number by a 2-digit number (area model)
Step 3	Multiply a 2-digit number by a 2-digit number
Step 4	Multiply a 3-digit number by a 2-digit number
Step 5	Multiply a 4-digit number by a 2-digit number
Step 6	Solve problems with multiplication
Step 7	Short division
Step 8	Divide a 4-digit number by a 1-digit number

Year 5 | Spring term | Block 1 – Multiplication and division B

Small steps

Step 9	Divide with remainders
Step 10	Efficient division
Step 11	Solve problems with multiplication and division

Year 5 | Spring term | Block 2 – Fractions B

Small steps

Step 1	Multiply a unit fraction by an integer
Step 2	Multiply a non-unit fraction by an integer
Step 3	Multiply a mixed number by an integer
Step 4	Calculate a fraction of a quantity
Step 5	Fraction of an amount
Step 6	Find the whole
Step 7	Use fractions as operators

Year 5 | Spring term | Block 3 – Decimals and percentages

Small steps

Step 1	Decimals up to 2 decimal places
Step 2	Equivalent fractions and decimals (tenths)
Step 3	Equivalent fractions and decimals (hundredths)
Step 4	Equivalent fractions and decimals
Step 5	Thousandths as fractions
Step 6	Thousandths as decimals
Step 7	Thousandths on a place value chart
Step 8	Order and compare decimals (same number of decimal places)

Year 5 – Term 2 Small Steps

Year 5 | Spring term | Block 3 – Decimals and percentages

Small steps

Step 9	Order and compare any decimals with up to 3 decimal places
Step 10	Round to the nearest whole number
Step 11	Round to 1 decimal place
Step 12	Understand percentages
Step 13	Percentages as fractions
Step 14	Percentages as decimals
Step 15	Equivalent fractions, decimals and percentages

Year 5 | Spring term | Block 4 – Perimeter and area

Small steps

Step 1	Perimeter of rectangles
Step 2	Perimeter of rectilinear shapes
Step 3	Perimeter of polygons
Step 4	Area of rectangles
Step 5	Area of compound shapes
Step 6	Estimate area

Year 5 | Spring term | Block 5 – Statistics

Small steps

Step 1	Draw line graphs
Step 2	Read and interpret line graphs
Step 3	Read and interpret tables
Step 4	Two-way tables
Step 5	Read and interpret timetables

Year 5 – Term 3 Small Steps

Year 5 | Summer term | Block 1 – Shape

Small steps

Step 1	Understand and use degrees
Step 2	Classify angles
Step 3	Estimate angles
Step 4	Measure angles up to 180°
Step 5	Draw lines and angles accurately
Step 6	Calculate angles around a point
Step 7	Calculate angles on a straight line
Step 8	Lengths and angles in shapes

Year 5 | Summer term | Block 1 – Shape

Small steps

Step 9	Regular and irregular polygons
Step 10	3-D shapes

Year 5 | Summer term | Block 2 – Position and direction

Small steps

Step 1	Read and plot coordinates
Step 2	Problem solving with coordinates
Step 3	Translation
Step 4	Translation with coordinates
Step 5	Lines of symmetry
Step 6	Reflection in horizontal and vertical lines

Year 5 | Summer term | Block 3 – Decimals

Small steps

Step 1	Use known facts to add and subtract decimals within 1
Step 2	Complements to 1
Step 3	Add and subtract decimals across 1
Step 4	Add decimals with the same number of decimal places
Step 5	Subtract decimals with the same number of decimal places
Step 6	Add decimals with different numbers of decimal places
Step 7	Subtract decimals with different numbers of decimal places
Step 8	Efficient strategies for adding and subtracting decimals

Year 5 – Term 3 Small Steps

Year 5 | Summer term | Block 3 – Decimals

Small steps

Step 9	Decimal sequences
Step 10	Multiply by 10, 100 and 1,000
Step 11	Divide by 10, 100 and 1,000
Step 12	Multiply and divide decimals – missing values

Year 5 | Summer term | Block 4 – Negative numbers

Small steps

Step 1	Understand negative numbers
Step 2	Count through zero in 1s
Step 3	Count through zero in multiples
Step 4	Compare and order negative numbers
Step 5	Find the difference

Year 5 | Summer term | Block 5 – Converting units

Small steps

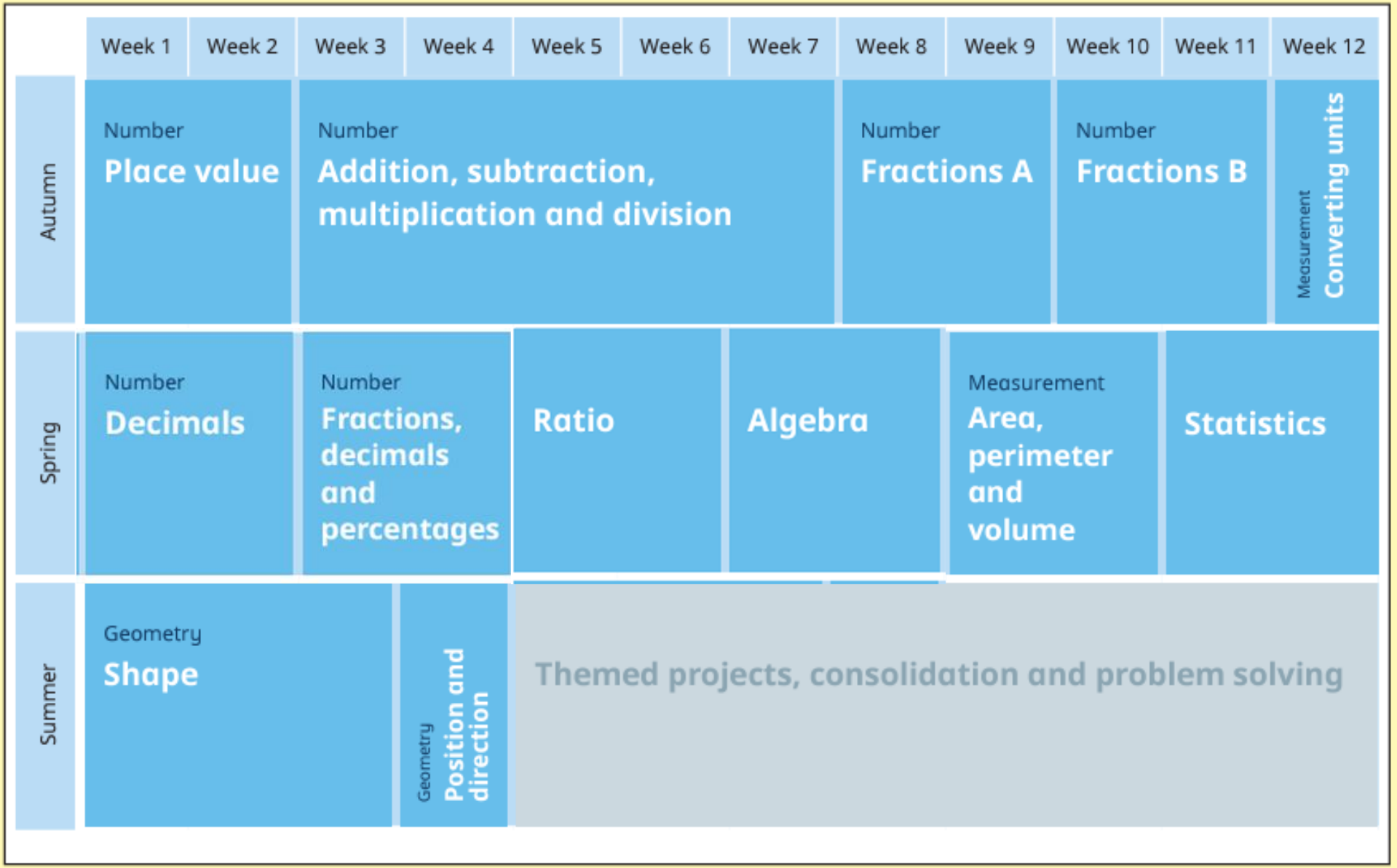
Step 1	Kilograms and kilometres
Step 2	Millimetres and millilitres
Step 3	Convert units of length
Step 4	Convert between metric and imperial units
Step 5	Convert units of time
Step 6	Calculate with timetables

Year 5 | Summer term | Block 6 – Volume

Small steps

Step 1	Cubic centimetres
Step 2	Compare volume
Step 3	Estimate volume
Step 4	Estimate capacity

Year 6 – Yearly Overview



Year 6 – Term 1 Small Steps

Year 6 | Autumn term | Block 1 – Place value

Small steps

Step 1	Numbers to 1,000,000
Step 2	Numbers to 10,000,000
Step 3	Read and write numbers to 10,000,000
Step 4	Powers of 10
Step 5	Number line to 10,000,000
Step 6	Compare and order any integers
Step 7	Round any integer
Step 8	Negative numbers

Year 6 | Autumn term | Block 2 – Addition, subtraction, multiplication and division

Small steps

Step 1	Add and subtract integers
Step 2	Common factors
Step 3	Common multiples
Step 4	Rules of divisibility
Step 5	Primes to 100
Step 6	Square and cube numbers
Step 7	Multiply up to a 4-digit number by a 2-digit number
Step 8	Solve problems with multiplication

Year 6 | Autumn term | Block 2 – Addition, subtraction, multiplication and division

Small steps

Step 9	Short division
Step 10	Division using factors
Step 11	Introduction to long division
Step 12	Long division with remainders
Step 13	Solve problems with division
Step 14	Solve multi-step problems
Step 15	Order of operations
Step 16	Mental calculations and estimation

Year 6 | Autumn term | Block 2 – Addition, subtraction, multiplication and division

Small steps

Step 17	Reason from known facts

Year 6 – Term 1 Small Steps

Year 6 | Autumn term | Block 3 – Fractions A

Small steps

Step 1	Equivalent fractions and simplifying
Step 2	Equivalent fractions on a number line
Step 3	Compare and order (denominator)
Step 4	Compare and order (numerator)
Step 5	Add and subtract simple fractions
Step 6	Add and subtract any two fractions
Step 7	Add mixed numbers
Step 8	Subtract mixed numbers

Year 6 | Autumn term | Block 3 – Fractions A

Small steps

Step 9	Multi-step problems

Year 6 | Autumn term | Block 4 – Fractions B

Small steps

Step 1	Multiply fractions by integers
Step 2	Multiply fractions by fractions
Step 3	Divide a fraction by an integer
Step 4	Divide any fraction by an integer
Step 5	Mixed questions with fractions
Step 6	Fraction of an amount
Step 7	Fraction of an amount – find the whole

Year 6 | Autumn term | Block 5 – Converting units

Small steps

Step 1	Metric measures
Step 2	Convert metric measures
Step 3	Calculate with metric measures
Step 4	Miles and kilometres
Step 5	Imperial measures

Year 6 – Term 2 Small Steps

Year 6 | Spring term | Block 3 – Decimals

Small steps

Step 1	Place value within 1
Step 2	Place value – integers and decimals
Step 3	Round decimals
Step 4	Add and subtract decimals
Step 5	Multiply by 10, 100 and 1,000
Step 6	Divide by 10, 100 and 1,000
Step 7	Multiply decimals by integers
Step 8	Divide decimals by integers

Year 6 | Spring term | Block 3 – Decimals

Small steps

Step 9	Multiply and divide decimals in context

Year 6 | Spring term | Block 4 – Fractions, decimals and percentages

Small steps

Step 1	Decimal and fraction equivalents
Step 2	Fractions as division
Step 3	Understand percentages
Step 4	Fractions to percentages
Step 5	Equivalent fractions, decimals and percentages
Step 6	Order fractions, decimals and percentages
Step 7	Percentage of an amount – one step
Step 8	Percentage of an amount – multi-step

Year 6 | Spring term | Block 4 – Fractions, decimals and percentages

Small steps

Step 9	Percentages – missing values

Year 6 – Term 2 Small Steps

Year 6 | Spring term | Block 1 – Ratio

Small steps

Step 1	Add or multiply?
Step 2	Use ratio language
Step 3	Introduction to the ratio symbol
Step 4	Ratio and fractions
Step 5	Scale drawing
Step 6	Use scale factors
Step 7	Similar shapes
Step 8	Ratio problems

Year 6 | Spring term | Block 1 – Ratio

Small steps

Step 9	Proportion problems
Step 10	Recipes

Year 6 | Spring term | Block 2 – Algebra

Small steps

Step 1	1-step function machines
Step 2	2-step function machines
Step 3	Form expressions
Step 4	Substitution
Step 5	Formulae
Step 6	Form equations
Step 7	Solve 1-step equations
Step 8	Solve 2-step equations

Year 6 | Spring term | Block 2 – Algebra

Small steps

Step 9	Find pairs of values
Step 10	Solve problems with two unknowns

Year 6 – Term 2 Small Steps

Year 6 | Spring term | Block 5 – Area, perimeter and volume

Small steps

Step 1	Shapes – same area
Step 2	Area and perimeter
Step 3	Area of a triangle – counting squares
Step 4	Area of a right-angled triangle
Step 5	Area of any triangle
Step 6	Area of a parallelogram
Step 7	Volume – counting cubes
Step 8	Volume of a cuboid

Year 6 | Spring term | Block 6 – Statistics

Small steps

Step 1	Line graphs
Step 2	Dual bar charts
Step 3	Read and interpret pie charts
Step 4	Pie charts with percentages
Step 5	Draw pie charts
Step 6	The mean

Year 6 – Term 3 Small Steps

Year 6 | Summer term | Block 1 – Shape

Small steps

Step 1	Measure and classify angles
Step 2	Calculate angles
Step 3	Vertically opposite angles
Step 4	Angles in a triangle
Step 5	Angles in a triangle – special cases
Step 6	Angles in a triangle – missing angles
Step 7	Angles in a quadrilateral
Step 8	Angles in polygons

Year 6 | Summer term | Block 1 – Shape

Small steps

Step 9	Circles
Step 10	Draw shapes accurately
Step 11	Nets of 3-D shapes

Year 6 | Summer term | Block 2 – Position and direction

Small steps

Step 1	The first quadrant
Step 2	Read and plot points in four quadrants
Step 3	Solve problems with coordinates
Step 4	Translations
Step 5	Reflections

Our Lady of the Rosary RC Primary School

Progression in Vocabulary

Our Journey

Love God

Others First

Respect All

Appendix 2 – Progression of Mathmatical vocabulary

Place value

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
amount, backwards, collection, count, few, fewer (than), forwards, how many, largest, lot(s), more (than), number, numeral, same, smallest, subitise	after, before, different, represent, zero	compare, count on, digit, fewest, greater than, greatest, less than, most, one(s), order, partition, represent, ten(s), ordinal numbers (first, second, third, etc)	exchange, interval, least, multiple, value,	ascending, descending, hundred(s), part, whole	place holder, Roman, numeral, round, thousands	hundred, thousand(s), integer, negative number, millions, power of 10, ten thousand	ten million

Addition and subtraction

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	1 less, 1 more, add, add more, altogether, first, left, now, part, take away, whole	addition, add together, subtraction/ subtract, difference, double, efficient, equal to, fact family, greater, group, inverse, less, minus, near double, number bond, plus, symbol, systematic, total	calculation, exchange, method, multiple, one(s), operation, partition, related facts, ten(s), value, increase, decrease, sum	column, addition, column, subtraction, digit, estimate, exchange, hundred(s), inverse, crossing the 10, crossing the 100,	efficient, inverse, round, thousand(s)	accurate, approximate, constant difference, strategy	order of operations

Multiplication and division

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	double, equal groups, even, fair, grouping, groups, odd, pair, sharing, unequal, groups	array, divide, repeated, addition	divide, even, half, lots of, multiply, odd, twice, times times-table,	commutative, inverse, multiple, product, remainder, scaling	factor, factor pair, inverse, triple, efficient	common multiple, common factor, cube number, prime number, square number	composite number, order of operations, powers of

Fraction, decimals and percentages

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		equal parts, half, quarter, whole	numerator, denominator, equivalent, unit fraction, non-unit fraction, third, two-quarters, three-quarters	scale, compare, convert	decimal equivalent, decimal place, decimal point, hundredths, improper, fractions, mixed, numbers, proper fractions, round, tenths	common denominator, fractional part, percentage, thousandth	simplify, simplest form, recurring

Measure (money)

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		amount, coin, note, money, pence (p), pound (£), unitise, value	change, cost, worth	convert	decimal		

Measure (length and height)

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
big, bigger, large, little, small, smaller	height, length, long, longer, longest, measure, short, shorter, shortest, tall, taller, tallest	centimetres, ruler	metres	convert, millimetres, perimeter	area, kilometres, rectilinear, width	imperial, inches, metric, volume	formula

Measure (mass, capacity and temperature)

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
big, bigger, large, little, small, smaller	balanced, balancing scales, empty, float, full, heavier, heaviest, heavy, least, less, light, lighter, lightest, mass, more, most, narrow, sink, tall, thin, weight, wide,	capacity, container, non-standard, volume	celsius, circular scales, degrees, grams, kilograms, litres, millilitres, temperature, thermometer	convert		cubic, centimetres, imperial metric, pints, pounds,	formula, gallon, ounces, tonnes

Measure (time)

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
first, next, now, then	after, afternoon, before, clock, day, evening, later, lunchtime, minute, morning, night, night-time, today, tomorrow, week, weekend, yesterday,	half past, hour, month, o'clock, second, watch, week,	five-minute intervals midnight, noon, quarter past, quarter to,	analogue clock, 12-hour clock, 24-hour clock, digital clock duration, leap year, am, pm, Roman numerals,			

Shape

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
build, curved, curvy, different, flat, match, pointy, round, same, sharp, stack	2-d shape, 3-d shape, circle, cone, corner, cube, cuboid, curved, cylinder, face, flat, pyramid, rectangle, rotate, set, sides, solid, sort, sphere, square, straight, surface, triangle	properties	edge, line of symmetry, symmetrical, vertex, vertices	acute, obtuse, angle, vertical horizontal, parallel, perpendicular, polygon, right angle	equilateral, regular, irregular, isosceles, parallelogram, quadrilateral, rhombus, scalene, trapezium	adjacent, degrees, reflex angle	base, circumference, diameter, dimensions, interior angles, intersect, net, opposite, angles, radius,

Statistics

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			block diagram, key, pictogram, table, tally chart, collect, record	axis, bar chart, cell, horizontal axis, label, scale, two-way table, title, vertical axis,	data, estimate, line graph	timetable, variable	average, dual bar chart, mean, pie chart

Position and direction

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
behind, between, down in, in front, inside, move, on, out, outside, over, through, under, up,	above, around, backwards, below, beside, bottom, forwards, map, next to, position, route, top	far, full turn, half turn, left, near, quarter turn, right, three-quarter turn, direction	anti-clockwise, between, clockwise		coordinates, grid, reflection, translation,	quadrant,	x-axis y-axis

Ratio and proportion

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
							additive, enlargement, multiplicative, proportion, ratio, scale factor, scaling, simplest form

Algebra

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
							algebra, equation, expression, function, input, linear output, rule, solve, substitution, value,

Pattern

White Rose MATHS

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
after, line, next, pattern, spot, star, stripe, swirl, zigzag	continue, copy, mistake, repeat, repeating, pattern, same, unit of repeat,		decreasing, increasing, sequence				

Our Lady of the Rosary RC Primary School

Progression of Skills

Our Journey

Love God

Others First

Respect All

Appendix 3 – Progression of Mathmatical skills and knowledge

Place value: Count

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • Count numbers to 100 in numerals; count in multiples of twos, fives and tens	• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	• count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	• count in multiples of 6, 7, 9, 25 and 1000 • count backwards through zero to include negative numbers	• count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • count forwards and backwards with positive and negative whole numbers, including through zero	
Autumn 1 Spring 1 Spring 3 Summer 4	Autumn 1	Autumn 1 Autumn 3	Autumn 1 Autumn 4	Autumn 1 Summer 4	

In the WRM schemes, negative numbers are introduced in Year 5

Place value: Represent

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• identify and represent numbers using objects and pictorial representations • read and write numbers to 100 in numerals • read and write numbers from 1 to 20 in numerals and words	• read and write numbers to at least 100 in numerals and in words • identify, represent and estimate numbers using different representations, including the number line	• identify, represent and estimate numbers using different representations • read and write numbers up to 1000 in numerals and in words	• identify, represent and estimate numbers using different representations • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value	• read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit • read Roman numerals to 1000 (M) and recognise years written in Roman numerals	• read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit
Autumn 1 Spring 1 Spring 3 Summer 4	Autumn 1	Autumn 1	Autumn 1	Autumn 1	Autumn 1

Place value: Use and compare

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• given a number, identify one more and one less	• recognise the place value of each digit in a two-digit number (tens, ones) • compare and order numbers from 0 up to 100; use <, > and = signs	• recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • compare and order numbers up to 1000	• find 1000 more or less than a given number • recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • order and compare numbers beyond 1000	• (read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit	• (read, write), order and compare numbers up to 10 000 000 and determine the value of each digit
Autumn 1 Spring 1 Spring 3 Summer 4	Autumn 1	Autumn 1	Autumn 1	Autumn 1	Autumn 1

Place value: Problems/Rounding

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• use place value and number facts to solve problems	• solve number problems and practical problems involving these ideas	• round any number to the nearest 10, 100 or 1000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers	• interpret negative numbers in context • round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • solve number problems and practical problems that involve all of the above	• round any whole number to a required degree of accuracy • use negative numbers in context, and calculate intervals across zero • solve number and practical problems that involve all of the above
	Autumn 1	Autumn 1	Autumn 1	Autumn 1	Autumn 1

Addition & subtraction: Calculations

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• add and subtract one-digit and two-digit numbers to 20, including zero	• add and subtract numbers using concrete objects, pictorial representations, and mentally, including: ➢ a two-digit number and ones ➢ a two-digit number and tens ➢ two two-digit numbers ➢ adding three one-digit numbers	• add and subtract numbers mentally, including: ➢ a three-digit number and ones ➢ a three-digit number and tens ➢ a three-digit number and hundreds • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	• add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	• add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • add and subtract numbers mentally with increasingly large numbers	• perform mental calculations, including with mixed operations and large numbers • use their knowledge of the order of operations to carry out calculations involving the four operations
Autumn 2 Spring 2	Autumn 2	Autumn 2	Autumn 2	Autumn 2	Autumn 2

Addition & subtraction: Problems

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9	• solve problems with addition and subtraction: ➢ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ➢ applying their increasing knowledge of mental and written methods	• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	• solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
Autumn 2 Spring 2	Autumn 2	Autumn 2	Autumn 2	Autumn 2	Autumn 2

Multiplication & division: Recall/Use

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	• recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	• recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers • recognise and use factor pairs and commutativity in mental calculations	• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	• identify common factors, common multiples and prime numbers • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
	Spring 2	Autumn 3 Spring 1	Autumn 4 Spring 1	Autumn 3	Autumn 2

Multiplication & division: Calculations

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs	• write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	• multiply two-digit and three-digit numbers by a one-digit number using formal written layout	• multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • multiply and divide numbers mentally drawing upon known facts • divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	• multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context • perform mental calculations, including with mixed operations and large numbers
	Spring 2	Autumn 3 Spring 1	Spring 1	Autumn 3 Spring 1	Autumn 2

Multiplication & division: Problems

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	• solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	• solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	• solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	• solve problems involving addition, subtraction, multiplication and division
Summer 1	Spring 2	Spring 1	Spring 1	Autumn 3 Spring 1	Autumn 2

Multiplication & division: Combined

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				• solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	• use their knowledge of the order of operations to carry out calculations involving the four operations
				Spring 1	Autumn 2

Fractions: Recognise and write

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• recognise, find and name a half as one of two equal parts of an object, shape or quantity • recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	• recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	• count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 • recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	• count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	• identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]	
Summer 2	Summer 1	Spring 3	Spring 4 Summer 1	Autumn 4	

Fractions: Compare

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	• recognise and show, using diagrams, equivalent fractions with small denominators • compare and order unit fractions, and fractions with the same denominators	• recognise and show, using diagrams, families of common equivalent fractions	• compare and order fractions whose denominators are all multiples of the same number	• use common factors to simplify fractions; use common multiples to express fractions in the same denomination • compare and order fractions, including fractions > 1
	Summer 1	Spring 3	Spring 3	Autumn 4	Autumn 3

Fractions: Calculations

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• write simple fractions for example, $\frac{1}{2}$ of 6 = 3	• add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]	• add and subtract fractions with the same denominator	• add and subtract fractions with the same denominator and denominators that are multiples of the same number • multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	• add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions • multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] • divide proper fractions by whole numbers [for example $\frac{1}{3} \div 2 = \frac{1}{6}$]
	Summer 1	Summer 1	Spring 3	Autumn 4 Spring 2	Autumn 3 Autumn 4

Fractions: Solve problems

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		• solve problems that involve all of the above		• solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	
		Spring 3 Summer 1		Spring 2	

Decimals: Recognise, write, compare

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			• recognise and write decimal equivalents of any number of tenths or hundredths • recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ • round decimals with one decimal place to the nearest whole number • compare numbers with the same number of decimal places up to two decimal places	• read and write decimal numbers as fractions [for example, 0.71 = $\frac{71}{100}$] • recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • round decimals with two decimal places to the nearest whole number and to one decimal place • read, write, order and compare numbers with up to three decimal places	• identify the value of each digit in numbers given to three decimal places
			Spring 4 Summer 1	Spring 3 Summer 3	Spring 3

Fractions, decimals and percentages

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			• solve simple measure and money problems involving fractions and decimals to two decimal places	• recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal • solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25	• associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] • recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
			Spring 3 Spring 4 Summer1	Spring 3	Spring 3 Spring 4

Ratio and proportion

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					• solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts • solve problems involving the calculation/use of percentages for comparison • solve problems involving similar shapes where the scale factor is known or can be found • solve problems involving unequal sharing and grouping using knowledge of fractions and multiples
					Spring 2

Algebra

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• *solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9*	• *recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems*	• *solve problems, including missing number problems*			• use simple formulae • generate and describe linear number sequences • express missing number problems algebraically • find pairs of numbers that satisfy an equation with two unknowns • enumerate possibilities of combinations of two variables
					Spring 2

Note – although formal algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives from Y1/2/3

Using measures

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• compare, describe and solve practical problems for: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time • measure and begin to record the following: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time (hours, minutes, seconds)	• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • compare and order lengths, mass, volume/capacity and record the results using >, < and =	• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	• Convert between different units of measure [for example, kilometre to metre; hour to minute] • estimate, compare and calculate different measures	• convert between different units of metric measure • understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling	• solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 d.p. where appropriate • use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 d.p. • convert between miles and kilometres
Spring 4 Spring 5 Summer 6	Spring 3 Spring 4	Spring 2 Spring 4	Spring 2 Summer 3	Spring 4 Summer 5 Summer 6	Autumn 5

Money

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• recognise and know the value of different denominations of coins and notes	• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value • find different combinations of coins that equal the same amounts of money • solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	• add and subtract amounts of money to give change, using both £ and p in practical contexts	• estimate, compare and calculate different measures, including money in pounds and pence	• use all four operations to solve problems involving measure [for example, money]	
Summer 5	Spring 1	Summer 2	Summer 2	Summer 3	

Time

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	• compare and sequence intervals of time • tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times • know the number of minutes in an hour and the number of hours in a day	• tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight • know the number of seconds in a minute and the number of days in each month, year and leap year • compare durations of events [for example to calculate the time taken by particular events or tasks]	• read, write and convert time between analogue and digital 12- and 24-hour clocks • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	• solve problems involving converting between units of time	• use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa Note – In the WRM schemes, time conversions are covered in Y5; the Y6 block concentrates on metric units.
Summer 6	Summer 2	Summer 3	Summer 3	Summer 5	Autumn 5

Perimeter, area, volume

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		• measure the perimeter of simple 2-D shapes	• measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares	• measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes • estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]	• recognise that shapes with the same areas can have different perimeters and vice versa • recognise when it is possible to use formulae for area and volume of shapes • calculate the area of parallelograms and triangles • calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units
		Spring 2	Autumn 3 Spring 2	Spring 4 Summer 6	Spring 5

2-D shapes

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles]	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • compare and sort common 2-D shapes and everyday objects	• draw 2-D shapes	• compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify lines of symmetry in 2-D shapes presented in different orientations	• distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • use the properties of rectangles to deduce related facts and find missing lengths and angles	• draw 2-D shapes using given dimensions and angles • compare and classify geometric shapes based on their properties and sizes • illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
Autumn 3	Autumn 3	Summer 4	Summer 4	Summer 1	Summer 1

3-D shapes

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]	• recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] • compare and sort common 3-D shapes and everyday objects	• make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them		• identify 3-D shapes, including cubes and other cuboids, from 2-D representations	• recognise, describe and build simple 3-D shapes, including making nets
Autumn 3	Autumn 3	Summer 4		Summer 1	Summer 1

Angles and lines

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		• recognise angles as a property of shape or a description of a turn • identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle • identify horizontal and vertical lines and pairs of perpendicular and parallel lines	• identify acute and obtuse angles and compare and order angles up to two right angles by size • identify lines of symmetry in 2-D shapes presented in different orientations • complete a simple symmetric figure with respect to a specific line of symmetry	• know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • draw given angles, and measure them in degrees • identify: ➢ angles at a point and one whole turn (total 360°) ➢ angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) ➢ other multiples of 90°	• find unknown angles in any triangles, quadrilaterals, and regular polygons • recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
		Summer 4	Summer 4	Summer 2	Summer 1

Position and direction

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• describe position, direction and movement, including whole, half, quarter and three-quarter turns	• order and arrange combinations of mathematical objects in patterns and sequences • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)		• describe positions on a 2-D grid as coordinates in the first quadrant • describe movements between positions as translations of a given unit to the left/right and up/down • plot specified points and draw sides to complete a given polygon	• identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	• describe positions on the full coordinate grid (all four quadrants) • draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Summer 3	Summer 4		Summer 6	Summer 2	Summer 2

Present and interpret data

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• interpret and construct simple pictograms, tally charts, block diagrams and simple tables	• interpret and present data using bar charts, pictograms and tables	• interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	• complete, read and interpret information in tables, including timetables	• interpret and construct pie charts and line graphs and use these to solve problems
	Summer 3	Summer 5	Summer 5	Spring 5	Spring 6

Solve statistical problems

MATHS

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	• ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions about totalling and comparing categorical data	• solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	• solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	• solve comparison, sum and difference problems using information presented in a line graph	• calculate and interpret the mean as an average
	Summer 3	Summer 5	Summer 5	Spring 5	Spring 6