Unsworth
Primary School

Together we build understanding

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Maths Curriculum

The Unsworth Maths Curriculum

Unsworth Primary School

Mathematics plays a key role in a child's development. Very young children are naturally curious, noticing differences in quantity and the shape of objects, and use early mathematical concepts when they play. Mathematical understanding helps children make sense of the world around them, interpret situations, and solve problems in everyday life, whether that's understanding time, sharing objects with their peers, or counting in play. Our children begin their maths journey within the Early Years Foundation Stage (Reception Class) and as they move through the different age phases, we continue to apply these principles to provide a high quality maths curriculum that enables all pupils to attain a sound understanding of mathematics. The skills the children learn at school help them with everyday life.

Each year group focuses on various units of work which includes key concepts of maths knowledge. The aims are to ensure that all children:

- **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 nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Dedicated time is timetabled to focus on mathematics each day. Teachers use the *White Rose Maths* in daily lessons and also to set pre-quizzes and post quizzes. These assessments provide teachers with information about what pupils do and do not know to build upon pupils' existing knowledge and understanding, inform the planning of future lessons and is the focus of targeted support. *White Rose* is supplemented with *Power Maths* which is aligned to the *White Rose Maths* progressions and schemes of learning. *Power Maths* is available for teachers to use whenever required; for example, for a starter to a particular lesson or for introducing a new concept, or to set games and activities for home learning.

In lessons, manipulatives (physical objects) and representations (such as number lines and graphs) are used to encourage discussions and teach a specific concept. These manipulatives act as a 'scaffold', and support the concrete-pictorial-abstract approach towards independence.

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Our big ideas in maths

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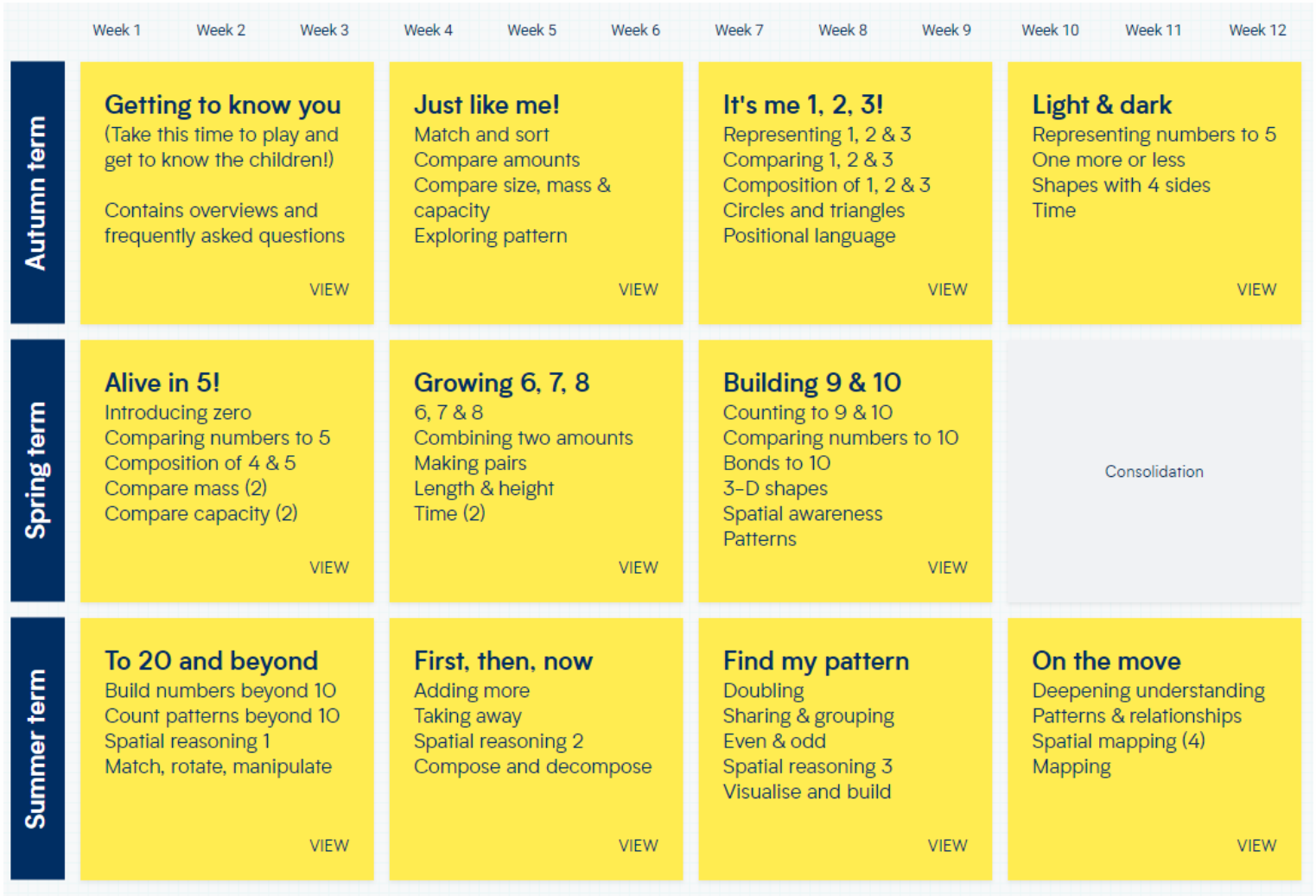
Our curriculum delivers the EYFS and the national curricum programme of study for maths. As a core subject, we dedicate 1 hour per day to the maths curriculum from Y1 to Y6 in addition to our daily morning work as children arrive in school. Our curriculum is designed to enable our children to work towards an understanding of the following 'big ideas' in maths. This cumulative knowledge is developed over time in appropriate, age-related steps.

By the time a child reaches the end of Y6 we expect them to have some understanding of the following:

- 1. Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.
- 2. Use and apply the methods of the 4 rules of number (addition, subtraction, multiplication and division) to real life contexts.
- 3. Identify common fractions and be able to add, subtract, multiple and divide them and associate a fraction with its decimal and percentage equivalent.
- 4. Use simple formulae and express missing number problems algebraically.
- 5. Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from smaller unit of measure to a larger unit, and vice versa, using notation up to three decimal places.
- 6. Draw 2-D shapes using given dimensions and angles and compare and classify geometric shapes based on their properties and size.
- 7. Recognise, describe and build simple 3-D shapes, including making nets.
- 8. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
- 9. Draw, translate and reflect simple shapes on the full coordinate grid.
- 10. Interpret and construct pie charts and line graphs and use these to solve problems.

Maths Units Overview – Reception

https://whiterosemaths.com/resources?year=early-years



	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 term	**Getting to know you** (Take this time to play and get to know the children!) Contains overviews and frequently asked questions VIEW			**Just like me!** Match and sort Compare amounts Compare size, mass & capacity Exploring pattern VIEW			**It's me 1, 2, 3!** Representing 1, 2 & 3 Comparing 1, 2 & 3 Composition of 1, 2 & 3 Circles and triangles Positional language VIEW			**Light & dark** Representing numbers to 5 One more or less Shapes with 4 sides Time VIEW		
Spring term	**Alive in 5!** Introducing zero Comparing numbers to 5 Composition of 4 & 5 Compare mass (2) Compare capacity (2) VIEW			**Growing 6, 7, 8** 6, 7 & 8 Combining two amounts Making pairs Length & height Time (2) VIEW			**Building 9 & 10** Counting to 9 & 10 Comparing numbers to 10 Bonds to 10 3-D shapes Spatial awareness Patterns VIEW			Consolidation		
Summer term	**To 20 and beyond** Build numbers beyond 10 Count patterns beyond 10 Spatial reasoning 1 Match, rotate, manipulate VIEW			**First, then, now** Adding more Taking away Spatial reasoning 2 Compose and decompose VIEW			**Find my pattern** Doubling Sharing & grouping Even & odd Spatial reasoning 3 Visualise and build VIEW			**On the move** Deepening understanding Patterns & relationships Spatial mapping (4) Mapping VIEW		

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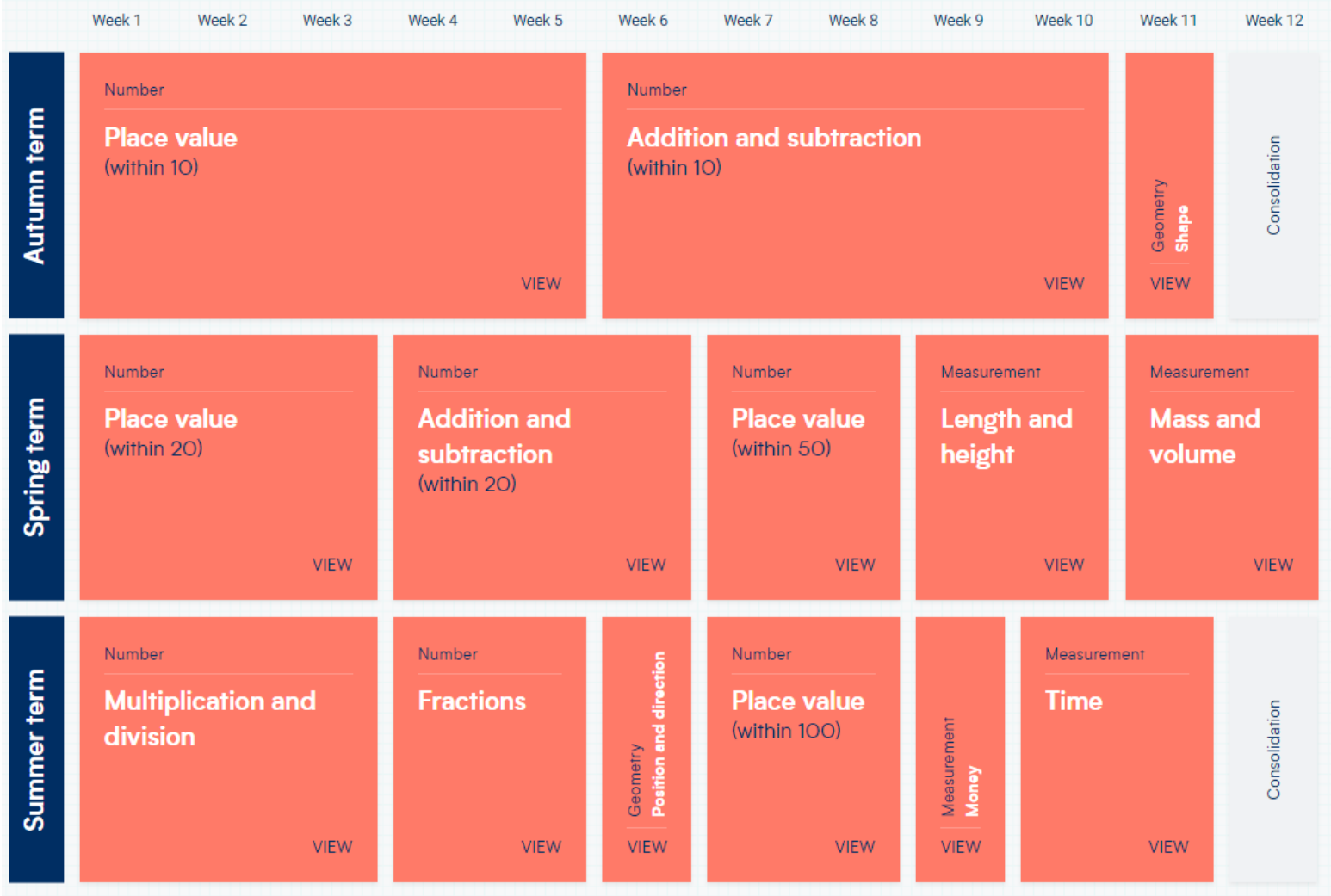
Maths Units Overview – Year 1

https://whiterosemaths.com/resources?year=year-1-new



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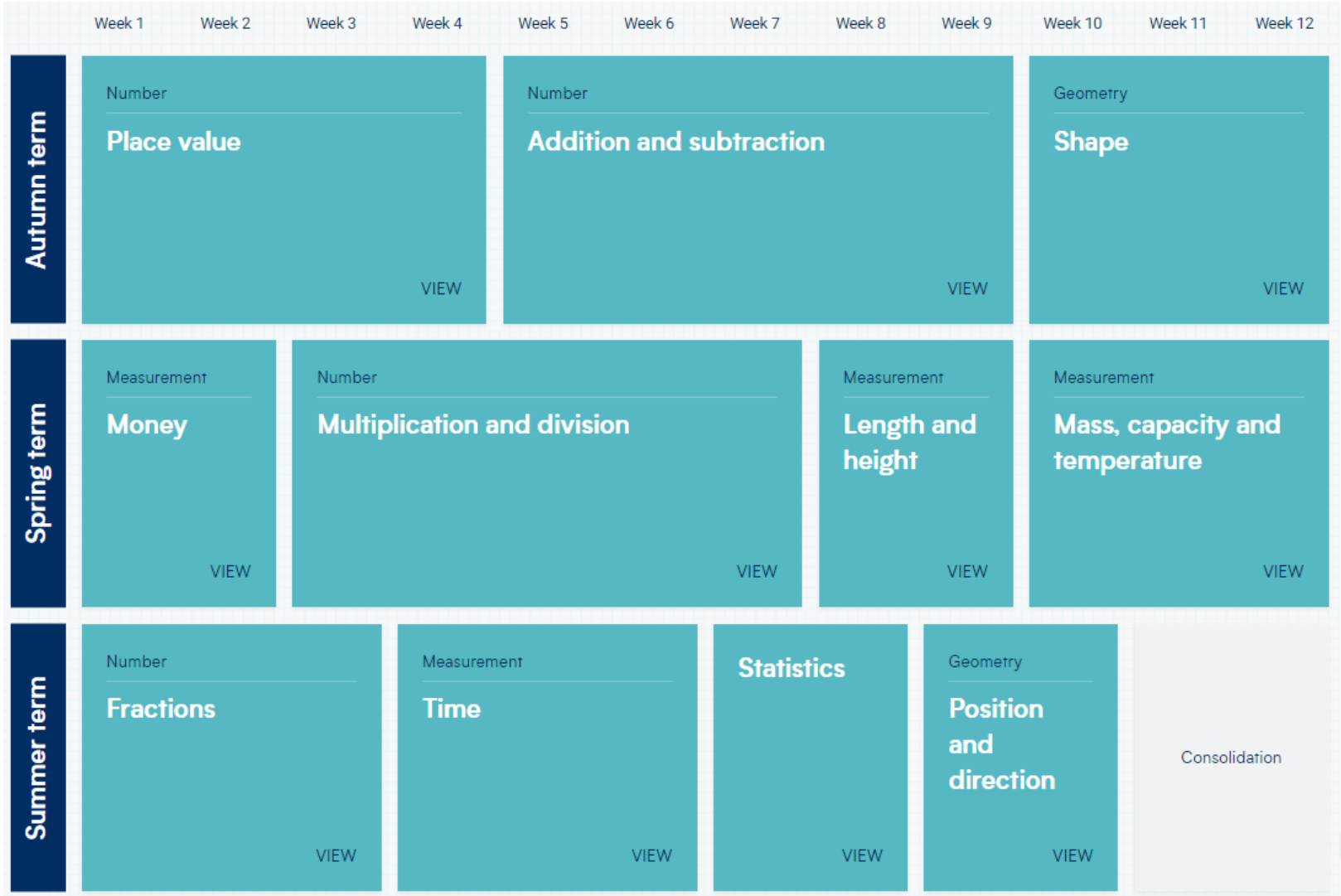
Maths Units Overview – Year 2

https://whiterosemaths.com/resources?year=year-2-new



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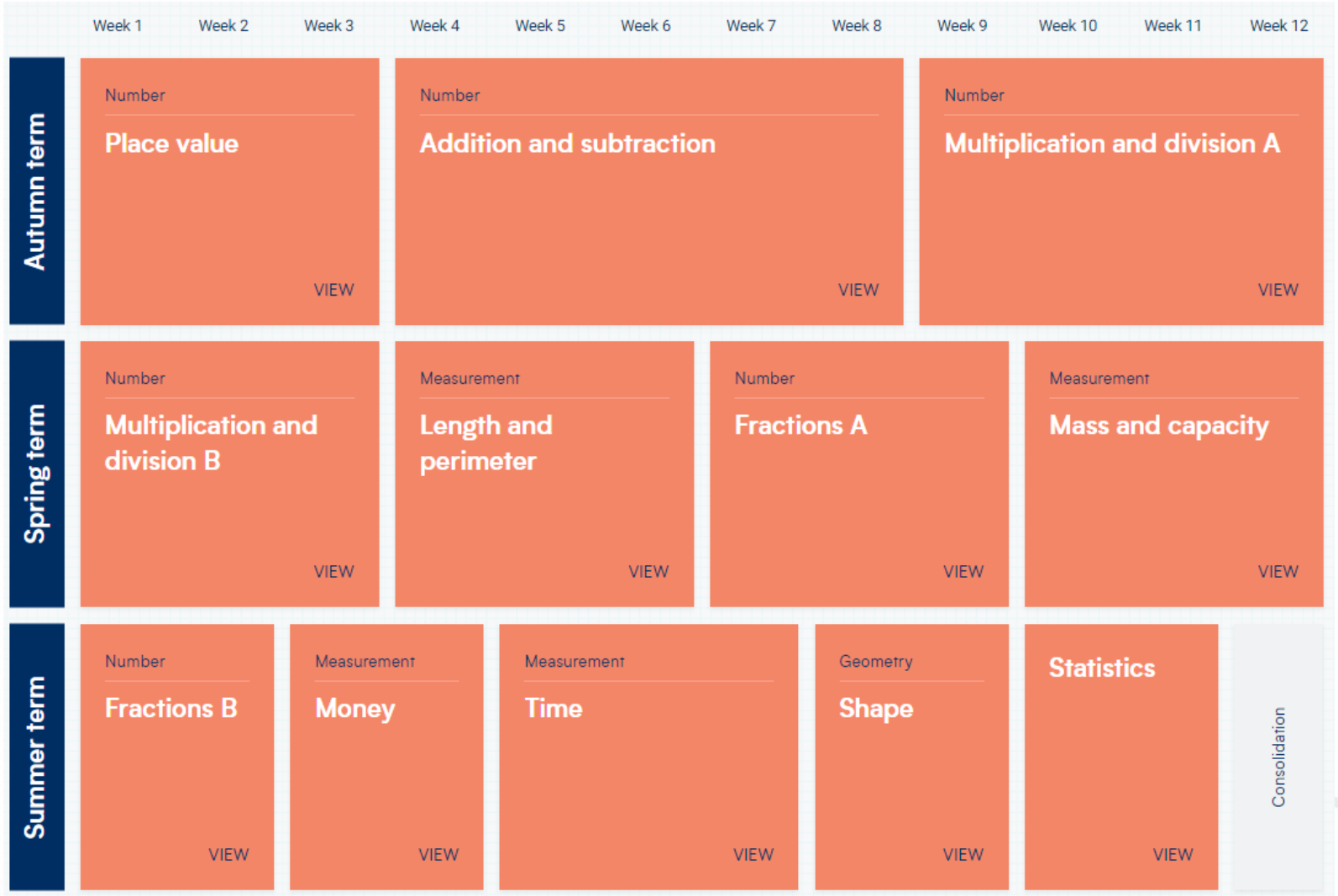
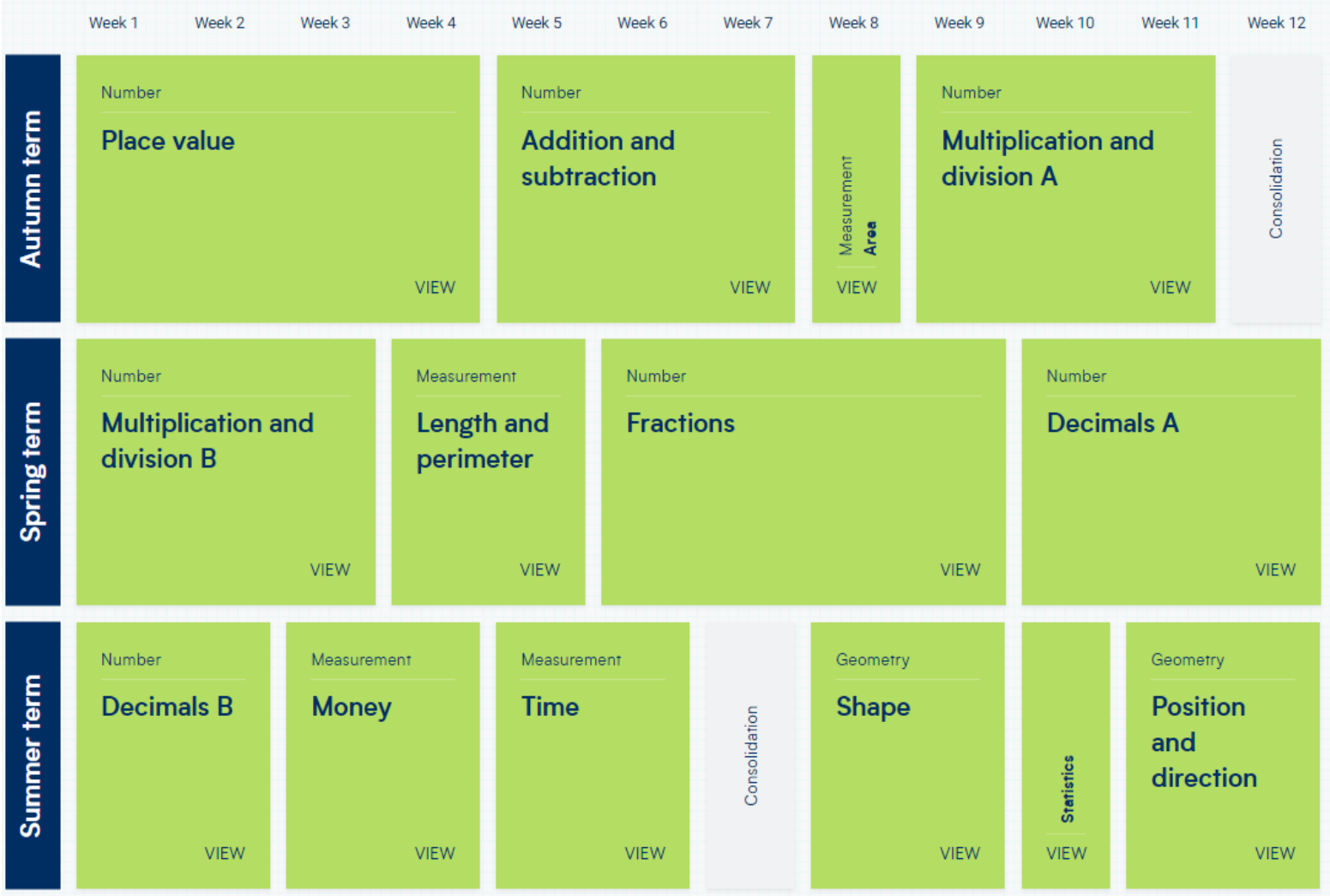
Maths Units Overview – Year 3

https://whiterosemaths.com/resources?year=year-3-new



Maths Units Overview – Year 4

https://whiterosemaths.com/resources?year=year-4-new



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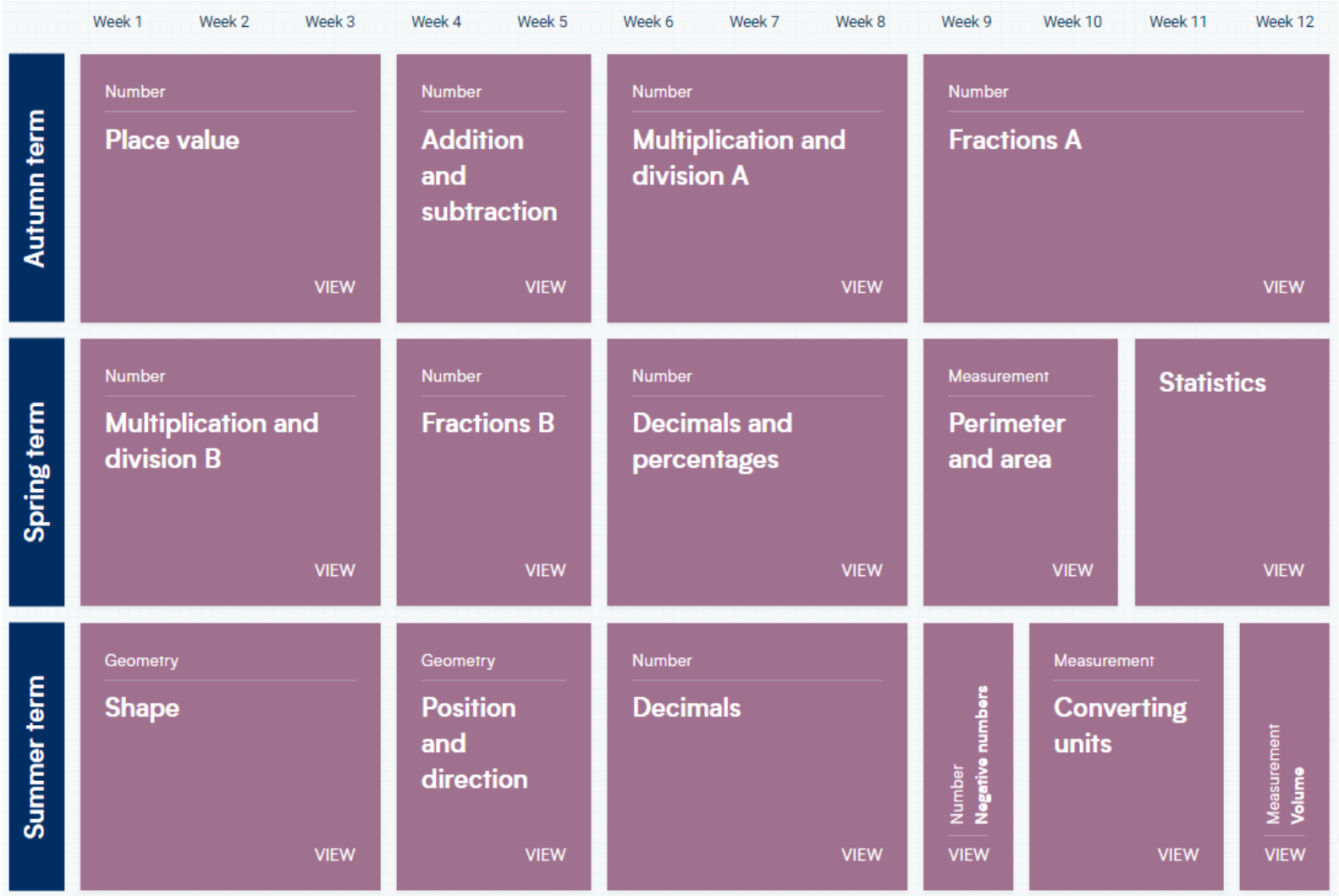
Maths Units Overview – Year 5

https://whiterosemaths.com/resources?year=year-5-new



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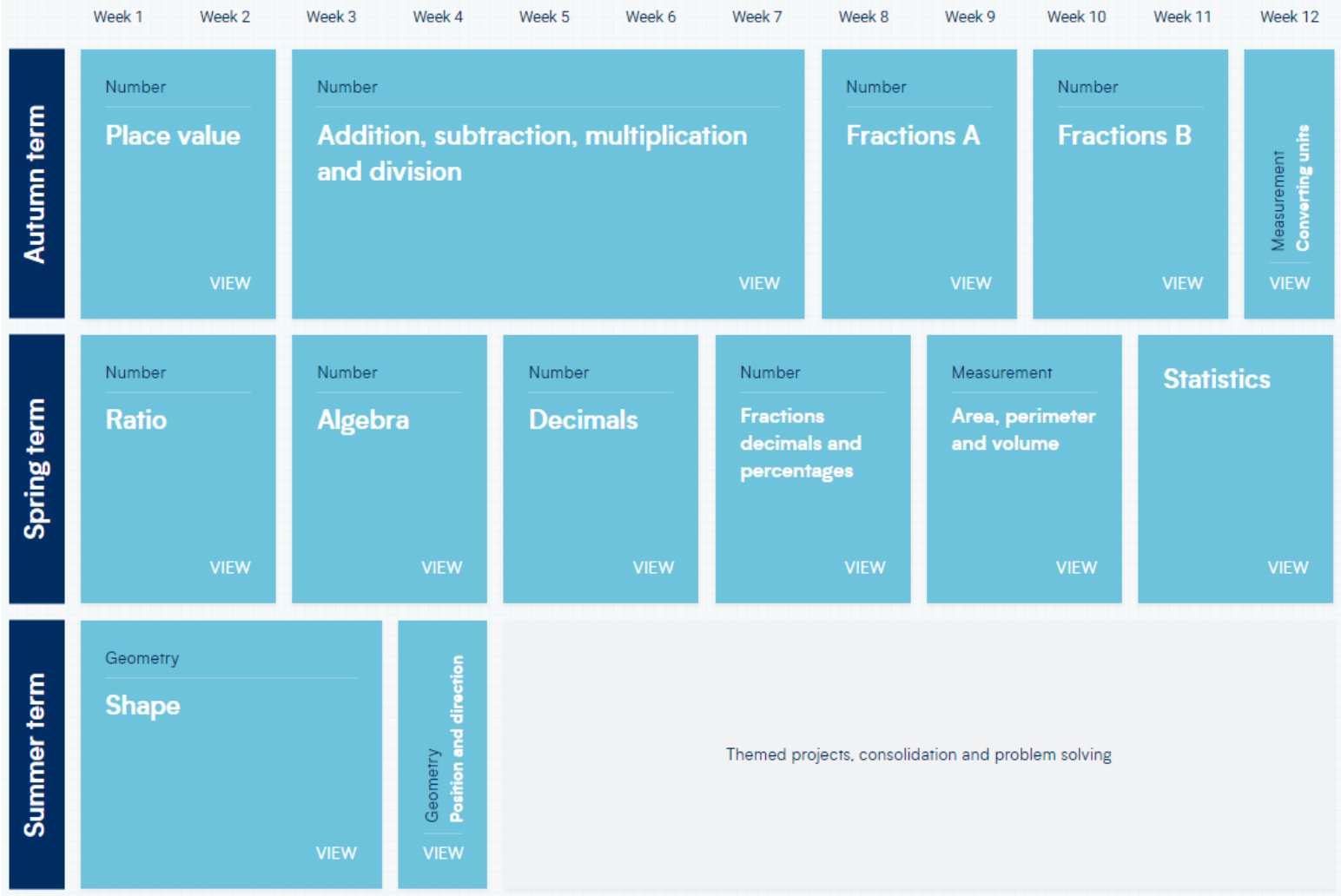
Maths Units Overview – Year 6

https://whiterosemaths.com/resources?year=year-6-new



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