## Mathletics

## Mathematics Mastery Curriculum Alignment Tool

## Skill Quests



Years R-3
June, 2022
$+-\quad / 1$
Mathematics Mastery

Mathematics
Mastery

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June, 2022

The aim of this document is to support Mathletics teachers, who use the Mathematics Mastery programme of learning, to make full use of the resources available within Mathletics. These resources can complement the learning taking place and teachers should use the curriculum alignment map provided to find 'best fit' activities.

Teachers should note that Problem Solving and Reasoning activities are not linked as part of this document and so there will be other suitable activities that will be worth exploring and directing pupils to.

## Reception

Mathematics Mastery Yearly Overview: Reception

| Autumn | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit 1: Early Mathematical experiences |  |  |  | Unit 2: <br> Pattern and Early Number |  | Unit 3: <br> Numbers within 6 |  | Unit 4: <br> Addition and subtraction within 6 | Unit 5: Measures | Unit 6: Shape and sorting | Consolidation |

## Autumn

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 1. Early mathematical experience | Reception | Measurement | Balancing Act |
|  | Reception | Time, Money and Data | Same and Different |
|  | Reception |  | Sort It |
| 2. Pattern and early number | Reception | Patterns and Problem Solving | Complete the Pattern |
|  | Reception |  | Simple Patterns |
|  | Reception |  | Missing it! |
|  | Reception |  | More, less or the same to 10 |
|  | Reception |  | Concept of zero |
| 3. Numbers within 6 | Reception | Numbers to 10 | Count to 5 |
|  | Reception |  | How Many? |
|  | Reception |  | Picture Graphs: More or Fewer |
| 4. Addition and subtraction within 6 | Reception | Operations with Number | Adding to 5 |
|  | Reception |  | Subtracting from 5 |
| 5. Measures | Reception | Measurement | Filling Fast! |
|  | Reception |  | Everyday Mass |
|  | Reception |  | Which Holds More? |
| 6. Shape and sorting | Reception | Space \& Shape | Where is it? |
|  | Reception |  | Collect the Shapes |

## Reception

## Mathematics Mastery Yearly Overview: Reception

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week <br> 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring | Unit 7: <br> Numbers within 10 |  | Unit 8: Calendar and time | Unit 9: <br> Addition and subtraction within 10 | Unit 10: Grouping and Sharing |  | Unit 11: <br> Number <br> patterns within 15 |  | Unit 12: <br> Doubling and halving | Unit 13: Shape and pattern | Consolidation |  |

## Spring

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 7. Numbers within 10 | Reception | Numbers to 10 | Matching Numbers to 10 |
|  | Reception |  | Order Numbers to 10 |
|  | Reception |  | More, less or the same to 10 |
|  | Reception |  | Dot Display |
| 8. Calendar and time | England Year 2 | Number and Place Value to 100 (2) | 1st to 31st |
|  | Reception | Time, Money and Data | Days of the Week |
| 9. Addition and subtraction within 10 | Reception | Operations with Number | Model Addition |
|  | Reception |  | Model Subtraction |
|  | Reception |  | Adding to Ten |
|  | Reception |  | Subtracting from Ten |
| 10. Grouping and sharing | England Year 1 | Multiplication and Division | Groups |
|  | Reception | Operations with Number | Share the Treasure |
| 11. Number patterns within 15 | Reception | Numbers to 10 | Ordinal Numbers |
| 12. Doubling and halving | Reception | Operations with Number | Doubles and Halves to $10$ |
| 13. Shape and pattern | Reception | Space \& Shape | Match the Object |
|  | Reception |  | Collect Simple Shapes |

## Reception

Mathematics Mastery Yearly Overview: Reception

| Summer | Week 1 | Week $2$ | Week 3 | Week <br> 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit 14: <br> Securing addition and subtraction facts |  | Unit 15: <br> Number patterns within 20 |  | Unit 16: <br> Number patterns beyond 20 | Unit 17: <br> Money | Unit 18: <br> Measures |  | Unit 19: <br> Exploration of patterns within number |  | Consolidation |  |

## Summer

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 14. Securing addition and subtraction facts | England Year 1 | Addition and Subtraction | Addition Facts |
|  | Reception | Patterns and Problem Solving | Adding to 10 Word Problems |
|  | Reception | Operations with Number | Adding to Make 5 and 10 |
| 15. Number patterns within 20 | Reception | Numbers to 20 | Counting Up to 20 |
|  | Reception |  | Order Numbers to 20 |
|  | Reception |  | Make Numbers Count |
|  | Reception |  | More, Less or the Same to 20 |
| 16. Number patterns beyond 20 | England Year 1 | Number and Place Value to 50 | Reading Numbers to 30 |
|  | England Year 1 |  | 1 to 30 |
| 17. Money | Reception | Time, Money and Data | Who has the Goods? |
| 18. Measures | Reception | Measurement | How Full? |
|  | Reception |  | Everyday Length |
|  | Reception |  | Comparing Length |
| 19. Exploration of patterns within number | Reception | Operations with Number | Adding to 10 Word Problems |


|  | 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 | Unit 1: Numbers to 10 |  | Unit 2: Addition and subtraction within 10 |  | Unit 3: Shape and patterns |  | Unit 4: Numbers to 20 |  | Unit 5: Addition and subtraction within 20 |  | Consolidation |  |

## Autumn

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 1. Numbers to 10 | England Year 1 | Number and Place Value Review | How Many? |
|  | England Year 1 |  | Order Numbers to 10 |
|  | England Year 1 |  | Matching Numbers to 10 |
|  | England Year 1 | Fractions | Doubles and Halves to 10 |
| 2. Addition and subtraction within 10 (Combination and partitioning) | England Year 1 | Addition and Subtraction | Adding to make 5 and 10 |
|  | England Year 1 |  | Balance Numbers to $10$ |
|  | England Year 1 |  | Subtracting from Ten |
| 3. Shapes and patterns | England Year 1 | Properties of Shape and Position | Collect Simple Shapes |
|  | England Year 1 |  | Match the Solid 1 |
|  | England Year 1 |  | Collect the Objects 1 |
|  | England Year 1 |  | Flip, Slide, Turn |
|  | England Year 1 |  | Where is it? |
| 4. Numbers to 20 | England Year 1 | Number and Place Value Review | Order Numbers to 20 |
|  | England Year 1 |  | Compare Numbers to 20 |
|  | England Year 1 |  | Matching Numbers to 20 |
|  | England Year 1 |  | Counting Up to 20 |
|  | England Year 1 |  | Making Teen Numbers |
|  | England Year 1 | Fractions | Doubles and Halves to 20 |
| 5. Addition and subtraction within 20 (Augmentation and reduction) | England Year 1 | Addition and Subtraction | Addition |
|  | England Year 1 |  | Addictive Addition |
|  | England Year 1 |  | All about Twenty |
|  | England Year 1 |  | Subtraction Facts to 18 |
|  | England Year 1 |  | Simple Subtraction |
|  | England Year 1 |  | Balance Numbers to 20 |

Mathematics Mastery Yearly Overview: Year 1

| Spring | Week <br> 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit 6: Time |  | Unit 7: <br> Exploring calculation strategies within 20 | Unit 8: <br> Numbers to 50 |  | Unit 9: Addition and subtraction within 20 (comparison) |  | Unit 10: Fractions | Un <br> Measu <br> Leng ma | 11: <br> res (1): <br> and <br> ss | Consolidation |  |

## Spring

Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 6. Time | England Year 1 | Time and Money | Hour Times |
|  | England Year 1 |  | Tell Time to the Half Hour (UK) |
|  | England Year 1 |  | Days of the Week |
|  | England Year 1 |  | Weekdays and Weekends |
|  | England Year 1 |  | Months After and Before |
|  | England Year 1 |  | Months of the Year |
| 7. Exploring calculation strategies within 20 | England Year 1 | Number and Place Value to 50 | More, Less or the Same to 20 |
|  | England Year 2 | Add and Subtract(2) | Magic Mental Addition |
|  | England Year 2 |  | Magic Mental Subtraction |
| 8. Numbers to 50 | England Year 1 | Number and Place Value to 50 | Counting Forwards |
|  | England Year 1 |  | Compare Numbers to 50 |
|  | England Year 1 |  | Making Numbers Count |
|  | England Year 1 |  | Reading Numbers to 30 |
|  | England Year 1 |  | 1 to 30 |
| 9. Addition and subtraction within 20 (Comparison and difference) | England Year 1 | Addition and Subtraction | Addition Facts |
|  | England Year 1 |  | Problems: Add and Subtract |
| 10. Fractions | England Year 1 | Fractions | Is it half? |
|  | England Year 1 |  | Halves and Quarters |
|  | England Year 1 |  | Doubles and Near Doubles |
| 11. Measures (1): Length and mass | England Year 1 | Length, Mass and Volume | Everyday Mass |
|  | England Year 1 |  | Everyday Length |
|  | England Year 1 |  | Comparing Length |
|  | England Year 1 |  | Measuring Length with Blocks |


|  | Week $\mathbf{1}$ | Week $\mathbf{2}$ | Week $\mathbf{3}$ | Week $\mathbf{4}$ | Week $\mathbf{5}$ | Week $\mathbf{6}$ | Week $\mathbf{7}$ | Week $\mathbf{8}$ | Week 9 | Week <br> $\mathbf{1 0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Week <br> $\mathbf{1 1}$ | Week <br> $\mathbf{1 2}$ |  |  |  |  |  |  |  |  |
|  | Uint 12: Numbers <br> 50 to 100 and <br> beyond | Unit 13: Addition <br> and subtraction <br> (applying <br> strategies) | Unit 14: Money | Unit 15: <br> Multiplication <br> and division | Unit 16: <br> Measures (2): <br> Capacity and <br> volume | Consolidation |  |  |  |  |

## Summer

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 12. Numbers 50 to 100 and beyond | England Year 1 | Number and Place Value to 100 | Going Up |
|  | England Year 1 |  | Going Down |
|  | England Year 1 |  | Number Lines |
|  | England Year 1 |  | Making Big Numbers Count |
|  | England Year 1 |  | Counting on a 100 grid |
|  | England Year 1 |  | Place Value 1 |
|  | England Year 1 |  | Number Line Order |
|  | England Year 1 |  | Counting by Twos |
|  | England Year 1 |  | Counting by Fives |
|  | England Year 1 |  | Counting by Tens |
|  | England Year 1 |  | Before, After \& Between to 100 |
|  | England Year 1 |  | Greater or Less to 100 |
|  | England Year 1 |  | Arranging Numbers |
| 13. Addition and subtraction (Applying strategies and structures) | England Year 1 | Problem Solving | Add and Subtract Problems |
|  | England Year 1 |  | Adding to 10 Word Problems |
|  | England Year 2 | Add and Subtract (1) | Add Three 1-Digit Numbers |
| 14. Money | England Year 1 | Time and Money | Everyday Money (GBP) |
|  | England Year 2 |  | Money - Who's got it? <br> (GBP) |
| 15. Multiplication and division | England Year 1 | Multiplication and Division | Groups |
|  | England Year 1 |  | Groups of Two |
|  | England Year 1 |  | Groups of Ten |
|  | England Year 1 |  | Groups of Five |
|  | England Year 1 |  | Share the Treasure |
|  | England Year 1 |  | Multiplication Arrays |
|  | England Year 1 |  | Model Multiplication to $5 \times 5$ |
| 16. Measures (2): Capacity and volume | England Year 1 | Length, Mass and Volume | Which Holds More? |
|  | England Year 1 |  | Filling Fast! |
|  | England Year 1 |  | Comparing Volume |
|  | England Year 1 |  | How Full? |

## Year 2

## Mathematics Mastery Yearly Overview: Year 2

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week <br> $\mathbf{1 0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week | Week |  |  |  |  |  |  |  |  |  |
| $\mathbf{1 1}$ |  |  |  |  |  |  |  |  |  |  |$|$

## Autumn

\left.| Outcome | Existing Course | Quests | Content |
| :--- | :--- | :--- | :--- |
| 1. Number within 100 | Count in number |  |  |
|  |  |  |  |$\right)$


|  | KS1 - Year 2 |  | Add two 2-digit numbers |
| :---: | :---: | :---: | :---: |
|  | KS1 - Year 2 |  | Subtracting 1-digit and 2-digit numbers |
|  | KS1 - Year 2 |  | Subtracting 2-digit numbers and 10 s |
|  | KS1 - Year 2 |  | Subtracting two 2digit numbers |
|  | KS1 - Year 2 |  | Introducing vertical addition and subtraction |
|  | KS1 - Year 2 |  | Using mental strategies to add and subtract |
|  | KS1 - Year 2 |  | Using the bar model within 20 |
| 3. Addition and subtraction word problems | KS1 - Year 2 | Problem solving: addition/subtraction | Addition and subtraction problems within 20 |
|  | KS1 - Year 2 |  | Addition and subtraction problems within 100 |
|  | KS2 - Year 4 | Solve 2-step problems in context | Solving addition and subtraction two-step problems |
|  | KS2 - Year 3 | Solve problems: add and subtract | Problem solving with addition and subtraction |
| 4. Measures: length | KS1 - Year 2 | Measure lengths | Measuring lengths informal |
|  | KS1 - Year 2 |  | Measuring lengths cm |
|  | KS1 - Year 2 |  | Selecting appropriate units to measure length |
|  | KS1 - Year 2 |  | Word problems using length |
|  | KS1 - Year 2 | Compare lengths, mass and volume | Comparing lengths |
| 5. Graphs | KS1 - Year 2 | Interpret and construct graphs | Pictograms |
|  | KS1 - Year 2 |  | Tally charts |
|  | KS1 - Year 2 |  | Block diagrams |
|  | KS1 - Year 2 |  | Tables |
|  | KS1 - Year 2 |  | Mixed data displays |
|  | KS1 - Year 2 |  | Constructing graphs |
|  | KS1 - Year 2 | Answer questions about data | Answering questions by counting |
|  | KS1 - Year 2 | Ask questions and collect data | Asking questions and collecting data |
| 6. Multiplication and division 2, 5, 10 | KS1 - Year 2 | Multiplication and division problems | Using arrays |
|  | KS1 - Year 2 |  | Adding to multiply |
|  | KS1 - Year 2 |  | Solving problems using multiplication and division |


|  | KS1 - Year 2 | Multiplication and | 2 times-tables |
| :---: | :---: | :---: | :---: |
|  | KS1 - Year 2 | division facts | 5 times-tables |
|  | KS1 - Year 2 |  | 10 times-tables |
|  | KS1 - Year 2 |  | Multiplying by $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s |
|  | KS1 - Year 2 |  | Dividing by 2 |
|  | KS1 - Year 2 |  | Dividing by 5 |
|  | KS1 - Year 2 |  | Dividing by 10 |
|  | KS1 - Year 2 |  | Dividing by $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10s |
|  | KS1 - Year 2 |  | Multiplying and dividing by 2,5 , and 10 |
|  | KS1 - Year 2 | Create mathematical sentences | Creating mathematical sentences |
|  | KS1 - Year 2 | Rules of multiplication | The commutative law of multiplication |
|  | KS1 - Year 2 |  | Relationship between multiplication and division |

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 1. Number within 100 | England Year 2 | Number and Place Value to 100 (1) | Place value 1 |
|  | England Year 2 |  | Number line order |
|  | England Year 2 |  | Compare Numbers to 100 |
|  | England Year 2 |  |  <br> Between to 100 |
|  | England Year 2 |  | Repartition Two-digit Numbers |
| Addition and subtraction of 2-digit numbers | England Year 2 | Add and Subtract <br> (1) | 1 more, 2 less |
|  | England Year 2 |  | 1 more, 10 less |
|  | England Year 2 |  | All about Twenty |
|  | England Year 2 |  | Balance Additions to 20 |
|  | England Year 2 |  | Simple Subtraction |
|  | England Year 2 |  | Fact Families: Add and Subtract |
|  | England Year 2 |  | Add Three 1-Digit Numbers |
|  | England Year 2 |  | Add 3 Single Digit Numbers |
|  | England Year 2 |  | Add 3 Numbers Using Bonds to 10 |
|  | England Year 2 |  | Complements to 10 , 20, 50 |
| 3. Addition and subtraction word problems | England Year 2 | Add and Subtract(2) | Problems: Add and Subtract |
|  | England Year 2 |  | Bar Model Problems 1 |


|  | England Year 2 | Problem Solving | Adding to 10 Word Problems |
| :---: | :---: | :---: | :---: |
|  | England Year 2 |  | Add and Subtract Problems |
|  | England Year 2 |  | Word Problems: Add and Subtract |
| 4. Measures: length | England Year 2 | Length, Mass and Volume | Measuring Length with Blocks |
|  | England Year 2 |  | How Long is That? |
|  | England Year 2 |  | Measure to the Nearest Half Centimetre |
|  | England Year 2 |  | Ordering Lengths (cm) |
| 5. Graphs | England Year 2 | Statistics | More or Less? |
|  | England Year 2 |  | Picture Graphs |
|  | England Year 2 |  | Column Graphs |
|  | England Year 2 |  | Sorting Data |
|  | England Year 2 |  | Tallies |
|  | England Year 2 |  | Making Graphs |
|  | England Year 2 |  | Reading from a Column Graph |
| 6. Multiplication and division 2, 5, 10 | England Year 2 | Multiply and Divide | Groups of Ten |
|  | England Year 2 |  | Groups of Two |
|  | England Year 2 |  | Groups of Five |
|  | England Year 2 |  | Dividing Tens |
|  | England Year 2 |  | Dividing Twos |
|  | England Year 2 |  | Dividing Fives |

## Year 2

## Mathematics Mastery Yearly Overview: Year 2

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring | Unit 7 | Time | Unit 8: <br> Fractions |  | Unit 9: Addition and subtraction of 2-digit numbers (regrouping and adjusting) |  | Unit 10: Money |  | Unit 11: Faces, shapes and patterns; lines and turns |  |  | Consolidation |

## Spring

| Outcome | Existing Course | Quests | Content |
| :---: | :---: | :---: | :---: |
| 7. Time | KS1 - Year 2 | Internals of time | Comparing and sequencing intervals of time |
|  | KS1 - Year 2 | Tell the time: digital and analogue | O'clock and half past (analogue clocks) |
|  | KS1 - Year 2 |  | O'clock and half past (digital clocks) |
|  | KS1 - Year 2 |  | Quarter past and quarter to (analogue clocks) |
|  | KS1 - Year 2 |  | Quarter past and quarter to (digital clocks) |
|  | KS1 - Year 2 |  | Telling time to 5 minutes (analogue clocks) |
|  | KS1 - Year 2 |  | Telling time to 5 minutes (digital clocks) |
|  | KS1 - Year 2 |  | Problem solving with hours and minutes |
| 8. Fractions | KS1 - Year 2 | Fractions | Halves |
|  | KS1 - Year 2 |  | Quarters |
|  | KS1 - Year 2 |  | Halves and quarters |
|  | KS1 - Year 2 |  | Thirds |
|  | KS1 - Year 2 |  | Counting in halves and quarters |
|  | KS1 - Year 2 |  | Counting in thirds |
|  | KS1 - Year 2 |  | Ordering and comparing simple fractions |
|  | KS1 - Year 2 |  | Finding quarters by halving |
|  | KS1 - Year 2 | Equivalence in fractions | Equivalence in fractions |
| 9. Addition and subtraction of 2-digit numbers(regrouping and adjusting) | KS2 - Year 3 | Solve problems: add and subtract | Problem solving with addition and subtraction |
| 10. Money | KS1 - Year 2 | Time and Money | Money - Who's got it? (GBP) |
|  | KS1 - Year 2 |  | How much Change? (GBP) |
| 11. Faces, shapes and patterns; lines and turns | KS1 - Year 2 | 3D shapes | Introducing spheres |
|  | KS1 - Year 2 |  | Introducing cubes |
|  | KS1 - Year 2 |  | Introducing cylinders |
|  | KS1 - Year 2 |  | Introducing prisms |
|  | KS1 - Year 2 |  | Introducing cones |
|  | KS1 - Year 2 |  | Introducing pyramids |


|  | KS1 - Year 2 |  | Describing the properties of 3D shapes |
| :---: | :---: | :---: | :---: |
|  | KS1 - Year 2 |  | Building 3D shapes |
|  | KS1 - Year 2 | Identify 2D <br> shapes on 3D shapes | Identifying 3D shapes in the environment |
|  | KS1 - Year 2 | Compare and sort | Sorting 2D shapes |
|  | KS1 - Year 2 | 2D and 3D | Sorting 3D shapes |
|  | KS1 - Year 2 | shapes | Comparing 2D shapes |
|  | KS1 - Year 2 |  | Comparing 3D shapes |
|  | KS1 - Year 2 | Patterns and sequences | Making patterns with shapes |
|  | KS1 - Year 2 |  | Number patterns |
|  | KS1 - Year 2 | Position, direction and movement | Describing position and movement |
|  | KS1 - Year 2 |  | Describing movement and turns |

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 7. Time | England Year 2 | Time and Money | Tell Time to the Half Hour (UK) |
|  | England Year 2 |  | Five Minute Times |
| 8. Fractions | England Year 2 | Fractions | Shade Fractions |
|  | England Year 2 |  | Divide Into Equal Groups |
|  | England Year 2 |  | Model Fractions |
|  | England Year 2 |  | Halves and Quarters |
|  | England Year 2 |  | Fractions of a Collection 1 |
|  | England Year 2 |  | Uneven partitioned shapes 1 |
| 9. Addition and subtraction of 2-digit numbers (regrouping and adjusting) | England Year 2 | Add and Subtract(2) | Magic Mental Addition |
|  | England Year 2 |  | Adding to 2-digit numbers |
|  | England Year 2 |  | Magic Mental Subtraction |
|  | England Year 2 |  | Repartition to Subtract |
|  | England Year 2 |  | Bar Model Problems 1 |
| 10. Money | England Year 2 | Combinations of coins | Combinations of money |
|  | England Year 2 | Add and subtract money | Adding and subtracting money |
| 11. Faces, shapes and patterns; lines and turns | England Year 2 | Properties of Shapes | Collect the Shapes 1 |
|  | England Year 2 |  | Collect the Objects |
|  | England Year 2 |  | Relate Shapes and Solids |
|  | England Year 2 |  | Match the Solid 1 |
|  | England Year 2 |  | How many Edges? |
|  | England Year 2 |  | How many Corners? |
|  | England Year 2 |  | How many Faces? |


|  | England Year 2 |  | Count Sides and <br> Corners |
| :--- | :--- | :--- | :--- |
|  | England Year 2 |  | Symmetry |
|  | England Year 2 | Faces, Edges and <br> Vertices |  |

## Mathematics Mastery Yearly Overview: Year 2

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summer | Unit12: <br> Numbers within 1000 | Unit 13: <br> Measures: Capacity and volume |  | Unit 14: Measures: Mass | Un calc stra | 15: <br> ring ation gies | Unit 16: Multiplication and division: 3 and 4 |  |  | Consolidation |  |  |

## Summer

| Outcome | Existing Course | Quests | Content |
| :---: | :---: | :---: | :---: |
| 12. Number within 1000 | Year 4 | Identify and represent numbers | Identifying up to 4-digit numbers |
|  | Year 4 |  | Identifying 3-digit numbers within 1,000 |
| 13. Measures: capacity and volume | KS1 - Year 2 | Measure volume | Capacity and volume |
|  | KS1 - Year 2 |  | Measuring capacity using litres |
|  | KS1 - Year 2 |  | Measuring capacity using millilitres |
|  | KS1 - Year 2 |  | Selecting appropriate units to measure volume |
|  | KS1 - Year 2 | Reading a thermometer | Temperature |
|  | KS1 - Year 2 | Identify correct unit of measure | Choosing the right unit of measure |
| 14. Measures: mass | KS1 - Year 2 | Measure mass | Introducing weight and mass |
|  | KS1 - Year 2 |  | Measuring mass in kilograms |
|  | KS1 - Year 2 |  | Measuring mass in grams |
| 15. Exploring calculation strategies | KS1 - Year 2 | Commutativity in addition | Commutativity in addition |
|  | KS1 - Year 2 | Rules of addition and subtraction | Relationships between addition and subtraction |
| 16. Multiplication and division ( $3 x$ and $4 x$ tables) | KS2 - Year 3 | Multiply by 3 | Exploring multiplication by 3 |
|  | KS2 - Year 3 |  | Recalling and using multiplication by 3 |
|  | KS2 - Year 3 | Multiply by 4 | Exploring multiplication by 4 |
|  | KS2 - Year 3 |  | Recalling and using multiplication by 4 |
|  | KS2 - Year 3 | Divide by 3 | Exploring division by 3 |
|  | KS2 - Year 3 |  | Recalling and using division facts for 3 |
|  | KS2 - Year 3 | Divide by 4 | Exploring division by 4 |
|  | KS2 - Year 3 |  | Recalling and using division by 4 |
|  | KS2 - Year 3 | Multiply and divide by 3 | Multiplying and dividing by 3 |
|  | KS2 - Year 3 | Multiply and divide by 4 | Multiplying and dividing by 4 |

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 12. Number within 1000 | England Year 3 | Number and Place Value (2) | Place Value 2 |
|  | England Year 3 |  | Model Numbers |
|  | England Year 3 |  | Place Value to Thousands |
|  | England Year 3 |  | Partition and Rename 1 |
|  | England Year 3 |  | Place Value Partitioning |
|  | England Year 3 |  | Odd and Even Numbers 1 |
| 13. Measures: capacity and volume | England Year 2 | Length, Mass and Volume | Temperature |
|  | England Year 2 |  | Using a Litre |
|  | England Year 2 |  | Ordering Volumes (1) |
|  | England Year 2 |  | Which Measuring Tool? |
| 14. Measures: mass | England Year 2 | Length, Mass and Volume | Ordering Mass (g) |
|  | England Year 2 |  | How Heavy? |
| 15. Exploring calculation strategies | England Year 2 | Problem Solving | Partition Puzzles 1 |
|  | England Year 2 |  | Commutative Property of Addition |
|  | England Year 2 |  | Bar Model Problems 1 |
|  | England Year 2 | Add and Subtract <br> (2) | Commutative Property of Addition |
|  | England Year 2 | Number and Place Value to 100 (2) | Doubles and Halves to 20 |
| 16. Multiplication and division( $3 x$ and $4 x$ tables) | England Year 3 | Multiply and Divide | Groups of Three |
|  | England Year 3 |  | Groups of Four |
|  | England Year 3 |  | Dividing Threes |
|  | England Year 3 |  | Dividing Fours |

Mathematics Mastery Yearly Overview: Year 3

|  | Week 1 | Week $2$ | Week $3$ | Week $4$ | Week 5 | Week 6 | Week 7 | $\begin{gathered} \text { Week } \\ 8 \end{gathered}$ | Week 9 | Week $10$ | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Autumn | Unit 1: Number sense and exploring calculation strategies |  |  | Unit 2: Place Value |  | Unit 3: Graphs | Unit 4: Addition and subtraction |  | Unit 4: Addition and subtraction | Unit 5: Length and perimeter |  | Consolidation |

## Autumn

| Outcome | Existing Course | Quests | Content |
| :---: | :---: | :---: | :---: |
| 1. Number sense and exploring calculation strategies | KS1 - Year 2 | Identify, represent and estimate numbers | Numbers to 100 |
|  | KS1 - Year 2 |  | Ordinal numbers |
|  | KS1 - Year 2 | Compare and order numbers up to 100 | Comparing and ordering numbers to 100 |
|  | KS1 - Year 2 | Read and write numbers to 100 | Reading and writing numbers to 100 |
|  | KS1 - Year 2 | Use place value to solve problems | Using place value to solve problems |
| 2. Place value | KS2 - Year 3 | Find 10 or 100 more or less | Finding 10 or 100 more or less than a number |
|  | KS2 - Year 3 | Recognise place value of 3-digit numbers | Recognising place value of 3-digit numbers |
|  | KS2 - Year 3 | Compare and order numbers up to 1,000 | Compare and order numbers up to 1,000 |
|  | KS2 - Year 3 | Identify, represent and estimate numbers using different representations | Identify and represent numbers |
|  | KS2 - Year 3 | Read and write numbers up to 1,000 in numerals and in words | Read and write numbers up to 1,000 |
|  | KS2 - Year 3 | 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 4, 8,50 and 100 |
| 3. Graphs | KS2 - Year 3 | Interpret and present data: bar charts | Interpreting data in bar charts |
|  | KS2 - Year 3 | Interpret and present data: pictograms | Interpreting data in pictograms |
|  | KS2 - Year 3 | Interpret and present data: tables | Interpreting data in tables |


|  | KS2 - Year 3 | Solve problems related to data displays | Using data in tables and pictograms |
| :---: | :---: | :---: | :---: |
|  | KS2 - Year 3 | Interpret and present data: bar chart | Interpreting and presenting data in a bar chart |
|  | KS2 - Year 3 | Interpret and present data: line graph | Interpreting and presenting data in line graphs |
|  | KS2 - Year 3 | Solve comparison / sum / difference problems | Solving comparison, sum and difference problems |
| 4. Addition and subtraction | KS2 - Year 3 | Add and subtract numbers mentally, including: a threedigit number and 1s, a three-digit number and 10s, a three-digit number and 100s | Add with 3-digit numbers |
|  | KS2 - Year 3 |  | Subtract with 3-digit numbers |
|  | KS2 - Year 3 |  | Add and subtract 3-digit numbers |
|  | KS2 - Year 3 | Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction | Formal addition up to 3 digits |
|  | KS2 - Year 3 |  | Formal subtraction up to 3 digits |
|  | KS2 - Year 3 | Estimate the answer to a calculation and use inverse operations to check answers | Estimate calculations |
| 5. Length and perimeter | KS2 - Year 4 | Measure and calculate perimeter | Measuring and calculating perimeters |
|  | KS2 - Year 3 | Measure perimeter of 2-D shapes | Measuring perimeter in cm |

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { 1. Number sense and } \\ \text { exploring calculation } \\ \text { strategies }\end{array}$ | England Year 3 | Number and | Number Lines |
|  | England Year 3 | Place Value (1) |  |$)$

## Year 3

|  | England Year 3 |  | Repartition Two-digit Numbers |
| :---: | :---: | :---: | :---: |
| 2. Place value | England Year 3 | Number and Place Value (2) | Place Value 2 |
|  | England Year 3 |  | Model Numbers |
|  | England Year 3 |  | Place Value to Thousands |
|  | England Year 3 |  | Partition and Rename 1 |
|  | England Year 3 |  | Place Value Partitioning |
| 3. Graphs | England Year 3 | Statistics | Interpreting Tables |
|  | England Year 3 |  | Tallies |
|  | England Year 3 |  | Pictographs |
|  | England Year 3 |  | Bar Graphs 1 |
|  | England Year 3 |  | Bar Graphs 2 |
|  | England Year 3 |  | Add and Subtract Using Graphs |
|  | England Year 3 |  | Reading from a Bar Chart |
| 4. Addition and subtraction | England Year 3 | Add and Subtract Mental | Magic Mental Addition |
|  | England Year 3 |  | Magic Mental Subtraction |
|  | England Year 3 |  | Complements to 10 , $20,50$ |
|  | England Year 3 |  | Complements to 50 and 100 |
|  | England Year 3 |  | Missing Numbers |
|  | England Year 3 |  | Estimate Sums |
|  | England Year 3 |  | Estimate Differences |
|  | England Year 3 |  | Pyramid Puzzles 1 |
|  | England Year 3 |  | Commutative Property of Addition |
|  | England Year 3 |  | Add 3 Numbers: Bonds to Multiples of 10 |
|  | England Year 3 |  | Add 3 Numbers: Bonds to 100 |
|  | England Year 3 |  | Find the Missing Number 1 |
| 5. Length and perimeter | England Year 2 | Length, Mass and Volume | How Long Is That? |
|  | England Year 2 |  | Measure to the Nearest Half Centimetre |
|  | England Year 2 |  | Ordering Lengths (cm) |


| Mathematics Mastery Yearly Overview: Year 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spring | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|  | Unit 6: <br> Multiplication and division |  | Unit 7: Deriving multiplication and division facts |  |  | Unit 8: Time |  | Unit 9: Fractions |  |  | Consolidation |  |

## Spring

| Outcome | Existing Course | Quests | Content |
| :---: | :---: | :---: | :---: |
| 6. Multiplication and division | KS2 - Year 3 | Multiply by 3 | Exploring multiplication by 3 |
|  | KS2 - Year 3 |  | Recalling and using multiplication by 3 |
|  | KS2 - Year 3 | Multiply by 4 | Exploring multiplication by 4 |
|  | KS2 - Year 3 |  | Recalling and using multiplication by 4 |
|  | KS2 - Year 3 | Divide by 3 | Exploring division by 3 |
|  | KS2 - Year 3 |  | Recalling and using division facts for 3 |
|  | KS2 - Year 3 | Divide by 4 | Exploring division by 4 |
|  | KS2 - Year 3 |  | Recalling and using division by 4 |
| 7. Deriving multiplication and division facts | KS2 - Year 3 | Multiply and divide by 3 | Multiplying and dividing by 3 |
|  | KS2 - Year 3 | Multiply and divide by 4 | Multiplying and dividing by 4 |
| 8. Time | KS2 - Year 3 | Tell the time: analogue clock | Telling the time to 5 minutes on analogue clocks |
|  | KS2 - Year 3 |  | Telling the time to the minute on analogue clocks |
|  | KS2 - Year 3 | Tell the time: Roman numerals | Telling the time and Roman numerals |
|  | KS2 - Year 3 | Tell the time: 12and 24-hour clock | Telling the time in 12and 24 -hour clock |
|  | KS2 - Year 3 | Estimate and read time | Comparing and ordering time in seconds and minutes |
|  | KS2 - Year 3 | Use time vocabulary: a.m. and p.m. | Using a.m. and p.m. notation |
|  | KS2 - Year 3 | Relationships between units of time | Recalling relationships between units of time |
|  | KS2 - Year 3 |  | Using calendars to solve problems: months \& years |
|  | KS2 - Year 3 |  | Using calendars to solve problems: hours \& days |
|  | KS2 - Year 3 | Compare durations of events | Comparing durations in hours, minutes and seconds |
|  | KS2 - Year 3 |  | Calculating elapsed time |


|  | KS2 - Year 3 |  | Calculating start and end times |
| :---: | :---: | :---: | :---: |
|  | KS2 - Year 4 | Read, write and convert units of time | Reading, writing and converting units of time |
| 9. Fractions | KS2 - Year 3 | Count up and down in tenths | Introducing tenths |
|  | KS2 - Year 3 |  | Counting in tenths |
|  | KS2 - Year 3 |  | Ordering tenths |
|  | KS2 - Year 3 | Recognise, find and write fractions | Recognising, finding and writing fractions |
|  | KS2 - Year 3 |  | Identifying a fraction of a set of objects |
|  | KS2 - Year 3 | Recognise and use fractions as numbers | Recognising and using fractions as numbers |
|  | KS2 - Year 3 | Recognise and show equivalent fractions | Recognise fractions equivalent to 1 |
|  | KS2 - Year 3 |  | Recognise equivalent fractions less than 1 |
|  | KS2 - Year 3 | Add fractions up to 1 whole | Adding unit fractions with the same denominator |
|  | KS2 - Year 3 |  | Adding proper fractions with the same denominator |
|  | KS2 - Year 3 | Subtract fractions within 1 whole | Subtracting unit fractions with same denominator |
|  | KS2 - Year 3 |  | Subtracting proper fractions with same denominator |
|  | KS2 - Year 3 | Add \& subtract fractions within 1 whole | Adding \& subtracting fractions (same denominator) |
|  | KS2 - Year 3 | Compare and order simple fractions | Comparing and ordering fractions |
|  | KS2 - Year 3 | Solve problems: fractions | Estimating/adding to find fractions of sets |
|  | KS2 - Year 3 |  | Finding the whole amount |
|  | KS2 - Year 3 |  | Finding the fraction of an amount |
|  | KS2 - Year 4 | Add fractions: same denominator | Adding fractions with the same denominator |
|  | KS2 - Year 4 | Subtract fractions: same denominator | Subtracting fractions with the same denominator |

## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 6. Multiplication and division | England Year 3 | Number and Place Value (1) | Counting up in 4s |
|  | England Year 3 | Multiply and Divide | Groups of Three |
| 7. Deriving multiplication and division facts | England Year 3 | Multiply and Divide | Groups of Four |
|  | England Year 3 |  | Dividing Threes |
|  | England Year 3 |  | Dividing Fours |
| 8. Time | England Year 3 | Time | Five Minute Times |
|  | England Year 3 |  | Tell Time to the Half Hour |
|  | England Year 3 |  | What is the Time? |
|  | England Year 3 |  | 24 Hour Time |
|  | England Year 3 |  | Using a Calendar |
| 9. Fractions | England Year 3 | Fractions (1) | Fractions of a Collection 2 |
|  | England Year 3 |  | Model Fractions |
|  | England Year 3 |  | Part-whole rods 2 |
|  | England Year 3 |  | Partition into equal parts |
|  | England Year 3 |  | Fraction Fruit Sets 1 |
|  | England Year 3 |  | Unit Fractions |
|  | England Year 3 |  | What Fraction is Shaded? |
|  | England Year 3 |  | Uneven partitioned shapes 1 |
|  | England Year 3 |  | Thirds and Sixths |
|  | England Year 3 | Fractions (2) | Uneven partitioned shapes 1 |
|  | England Year 3 |  | Uneven partitioned shapes 2 |
|  | England Year 3 |  | Add: Common Denominator |
|  | England Year 3 |  | Subtract: Common Denominator |
|  | England Year 3 |  | Equivalent Fraction Wall 1 |
|  | England Year 3 |  | Compare fractions 1a |
|  | England Year 3 |  | Add subtract fractions 1 |
|  | England Year 3 |  | Shading Equivalent Fractions |
|  | England Year 3 |  | Comparing Fractions 1 |
|  | England Year 3 |  | Identifying Fractions on a Number Line |


| Summer | Week <br> 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week <br> 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit 10: Angles and Shape |  |  | Unit 11: Measures |  |  | Unit 12: <br> Securing multiplication and division | Unit 13: calcu strateg place | xploring ation es and value | Consolidation |  |  |

## Summer

| Outcome | Existing Course | Quests | Content |
| :---: | :---: | :---: | :---: |
| 10. Angles and shape | KS2 - Year 3 | Recognise turns and angles | Recognising turns and angles |
|  | KS2 - Year 3 | Identify right angles | Identifying right angles in shapes |
|  | KS2 - Year 3 |  | Comparing angles |
|  | KS2 - Year 3 | Identify horizontal and vertical lines | Identifying horizontal and vertical lines |
|  | KS2 - Year 3 | Identify parallel \& perpendicular lines | Identifying parallel and perpendicular lines |
|  | KS2 - Year 3 | Compare and describe 2-D shapes | Comparing and describing 2-D shapes |
|  | KS2 - Year 3 | Recognise 3-D shapes | Making models of 3-D shapes |
|  | KS2 - Year 3 |  | Comparing, sorting and naming 3-D shapes |
| 11. Measures | KS2 - Year 3 | Length: measure, compare, add \& subtract | Introducing formal units for millimetres |
|  | KS2 - Year 3 |  | Measuring length in metres and centimetres |
|  | KS2 - Year 3 |  | Selecting appropriate units of measurement |
|  | KS2 - Year 3 |  | Comparing: length |
|  | KS2 - Year 3 |  | Ordering: length |
|  | KS2 - Year 3 |  | Adding and subtracting: length |
|  | KS2 - Year 3 | Mass: measure, compare, add \& | Measuring mass in kg $\& \mathrm{~g}$ |
|  | KS2 - Year 3 | subtract | Comparing and ordering: mass |
|  | KS2 - Year 3 |  | Adding and subtracting: mass |
|  | KS2 - Year 3 | Volume: measure, compare, add \& | Measuring volume in litres and millilitres |
|  | KS2 - Year 3 | subtract | Comparing and ordering: units of volume |
|  | KS2 - Year 3 |  | Adding and subtracting: volume |
| 12. Securing multiplication \& division | KS2 - Year 3 | Solve problems: multiplication/division | Solving correspondence problems |
|  | KS2 - Year 3 |  | Using the commutative property of multiplication |



## Activities

| Outcome | Existing Course | Topic | Activity Name |
| :---: | :---: | :---: | :---: |
| 10. Angles and shape | England Year 3 | Properties of Shapes | Right Angle Relation |
|  | England Year 3 |  | Sides, Angles and Diagonals |
|  | England Year 3 |  | What Line am I? |
| 11. Measures | England Year 2 | Length, Mass and Volume | How Heavy? |
|  | England Year 2 |  | Ordering Mass (g) |
|  | England Year 2 |  | Ordering Volumes (I) |
|  | England Year 3 |  | Measuring Length |
|  | England Year 3 |  | How Long is That? |
|  | England Year 3 |  | How Heavy? |
| 12. Securing multiplication \& division | England Year 3 | Multiply and Divide | Groups of Eight |
|  | England Year 3 |  | Dividing Eights |
|  | England Year 3 |  | Multiply: 2-Digit by 1Digit |
|  | England Year 3 |  | Related Facts 2 |
|  | England Year 3 |  | Fact Families: Multiply and Divide |
|  | England Year 3 |  | Times Tables |

## Mathletics

## For more information about Mathletics, contact our friendly team.

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