**CJS Year 3 Maths overview**

Autumn 1

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| **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** |
| **Assessment**  Make flashcards of important KS1 facts.  Presentation in books.  Counting.  Number bonds to 10, 20 and 100. | **Place value**   * Partition 3 digit numbers into HTO (counters, straw bundles, base 10, drawings of base 10, bar model). * Partition 3 digit numbers in different ways (counters, straw bundles, base 10, drawings of base 10, bar model). * Solve balancing equations with partitioning numbers in different ways. * Position of HTO on a number line with benchmarks labelled. * Position of HTO on a number line with only two benchmarks. * Position of the same HTO on differently benchmarked number lines.   **Counting**   * Adding / subtracting O, T, Hs without crossing boundaries. * Adding / subtracting O, T, Hs crossing boundaries by using counters on a place value grid and exchanging.   **Comparing and ordering**   * Saying which is bigger / smaller out of two HTO numbers, represented in different ways (concrete, pictorial and abstract). * Using < and > to show the relative size of two HTO numbers. * Saying which is bigger / smaller out of three+ HTO numbers, represented in different ways (concrete, pictorial and abstract). | | **Addition and subtraction**   * Add and subtract multiples of 100 * HTO +- O without crossing 10. * HTO +- 0 crossing 10. * HTO +- O, generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- multiple of 10 without crossing 100. * HTO +-multiple of 10 crossing 100. * HTO +- multiple of 10, generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- multiple of 100 without crossing 1000. * HTO +- multiple of 100 crossing 1000. * HTO +- multiple of 100, generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- TO not crossing 10 or 100. * HTO +- TO crossing 10 or 100. * HTO +- TO, generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- HTO not crossing 10, 100 or 1000. * HTO +- HTO not crossing 10, 100 or 1000. * HTO +- HTO, generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +– HTO using concrete materials, no exchange then exchange. * HTO +– HTO using pictorial method, no exchange then exchange. * HTO +– HTO using expanded column method, no exchange. * HTO +– HTO using expanded column method, exchange in ones only. * HTO +– HTO using expanded column method, exchange in tens only. * HTO +– HTO using expanded column method, exchange in ones and tens. * HTO +– HTO using contracted column method, no exchange. * HTO +– HTO using contracted column method, exchange in ones only. * HTO +– HTO using contracted column method, exchange in tens only. * HTO +– HTO using contracted column method, exchange in ones and tens. * Missing number problems (whole and part unknown) HTO +-HTO. * Balancing equations (whole and part unknown) HTO +- HTO. * Number problem solving. * Sort worded problems based on whether the whole or a part is unknown. | | | | |

Autumn 2

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| **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** |
| **4 times table**   * Count forwards and backwards in 4s and 40s. * Classify numbers based on whether they are multiples of 4 or not. * Multiply numbers by 4 within times tables. * Multiply TO by 4 using base 10 or place value counters with no exchange. * Multiply TO by 4 using a grid method with no exchange. * Multiply TO by 4 using base 10 or place value counters with exchange. * Multiply TO by 4 using a grid method with exchange. * Commutative law for 4 times table. * Bar modelling and number line representation for multiplying by 4 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 4 by counting in 4s with no remainders. * Dividing by 4 by splitting the whole into 4 groups with no remainders. * Dividing by 4 by counting in 4s with remainders. * Dividing by 4 by splitting the whole into 4 groups with remainders. * Divide TO by 4 by chunking. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 4. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | | **8 times table**   * Count forwards and backwards in 8s and 80s. * Classify numbers based on whether they are multiples of 8 or not. * Multiply numbers by 8 within times tables. * Multiply TO by 8 using base 10 or place value counters with no exchange. * Multiply TO by 8 using a grid method with no exchange. * Multiply TO by 8 using base 10 or place value counters with exchange. * Multiply TO by 8 using a grid method with exchange. * Commutative law for 8 times table. * Bar modelling and number line representation for multiplying by 8 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 8 by counting in 8s with no remainders. * Dividing by 8 by splitting the whole into 8 groups with no remainders. * Dividing by 8 by counting in 8s with remainders. * Dividing by 8 by splitting the whole into 8 groups with remainders. * Divide TO by 8 by chunking. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 8. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | | **50 times table**   * Count forwards and backwards in 50s. * Classify numbers based on whether they are multiples of 50 or not. * Multiply numbers by 50. * Commutative law for 50 times table. * Bar modelling and number line representation for multiplying by 50 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 50 by counting in 50s with no remainders. * Dividing by 50 by counting in 50s with remainders. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 50. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | **3 and 6 times tables**   * Count forwards and backwards in 3s and 30s, 6s and 60s. * Classify numbers based on whether they are multiples of 3 and 6 or not. * Multiply numbers by 3 and 6 within times tables. * Multiply TO by 3 and 6 using base 10 or place value counters with no exchange. * Multiply TO by 3 and 6 using a grid method with no exchange. * Multiply TO by 3 and 6 using base 10 or place value counters with exchange. * Multiply TO by 3 and 6 using a grid method with exchange. * Commutative law for 3 and 6 times table. * Bar modelling and number line representation for multiplying by 3 and 6 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 3 and 6 by counting in 3s and 6s with no remainders. * Dividing by 3 and 6 by splitting the whole into 3 and 6 groups with no remainders. * Dividing by 3 and 6 by counting in 4s and 6s with remainders. * Dividing by 3 and 6 by splitting the whole into 3 and 6 groups with remainders. * Divide TO by 3 and 6 by chunking. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 3 and 6. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | |

Spring 1

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| **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** |
| **Money**   * Coins and notes in the money system. * Using different coins to make given amounts. * Using a place value grid to show how to write money using a decimal point (£ / 10ps / 1ps). * Convert pounds to pence and pence to pounds. * Partition amounts of money into £, 10ps and 1ps. * Partition amounts of money in different ways. * Position of amounts of money on a number line with benchmarks labelled. * Position of amounts of money on a number line with only two benchmarks. * Position of the same amount of money on differently benchmarked number lines. | **Addition and subtraction of money**   * Add and subtract multiples of 100p / £1 * HTO +- O (in pence) and O.th (in pounds) without crossing 10p. * HTO +- O (in pence) and O.th (in pounds) crossing 10p. * HTO +- O (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- multiple of 10p (in pence) and O.th (in pounds) without crossing 100p / £1. * HTO +-multiple of 10p (in pence) and O.th (in pounds) crossing 100 / £1. * HTO +- multiple of 10p (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- multiple of 100p / £1 (in pence) and O.th (in pounds) without crossing 1000p / £10. * HTO +- multiple of 100p / £1 (in pence) and O.th (in pounds) crossing 1000 / £10. * HTO +- multiple of 100p / £1 (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- TO (in pence) and O.th (in pounds) not crossing 10p or 100p / £1. * HTO +- TO (in pence) and O.th (in pounds) crossing 10p or 100p / £1. * HTO +- TO (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- HTO (in pence) and O.th (in pounds) not crossing 10p, 100p / £1 or 1000p / £10. * HTO +- HTO (in pence) and O.th (in pounds) not crossing 10p, 100p / £1 or 1000p / £10. * HTO +- HTO (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +– HTO (in pence) and O.th (in pounds )using concrete materials, no exchange then exchange. * HTO +– HTO (in pence) and O.th (in pounds) using pictorial method, no exchange then exchange. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, no exchange. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, exchange in ones only. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, exchange in tens only. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, exchange in ones and tens. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, no exchange. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, exchange in ones only. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, exchange in tens only. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, exchange in ones and tens. * Missing number problems (whole and part unknown) HTO +-HTO (in pence) and O.th (in pounds). * Balancing equations (whole and part unknown) HTO +- HTO (in pence) and O.th (in pounds). * Number problem solving * Sort worded problems based on what is unknown. | | | **Properties of shape**   * Name the 2D shapes and label their properties (number of sides, vertical line symmetry). * Draw 2D shapes accurately using squared and isometric paper. * Sort shapes based on their properties (number of sides, regularity, vertical line symmetry). * Identify parallel and perpendicular lines in 2D shapes and label them. * Sort shapes based on parallel and perpendicular lines. * Name the 3D shapes and make them using modelling material. * Match 2D drawings to 3D shapes. * Label the properties of 3D shapes on drawings (number of edges, number of vertices, number of faces). * Sort 3D shapes based on their properties. * Identify horizontal and vertical lines in shapes. | |

Spring 2

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| **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** |
| **4 times table**   * Count forwards and backwards in 4s and 40s. * Classify numbers based on whether they are multiples of 4 or not. * Multiply numbers by 4 within times tables. * Multiply TO by 4 using base 10 or place value counters with no exchange. * Multiply TO by 4 using a grid method with no exchange. * Multiply TO by 4 using base 10 or place value counters with exchange. * Multiply TO by 4 using a grid method with exchange. * Commutative law for 4 times table. * Bar modelling and number line representation for multiplying by 4 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 4 by counting in 4s with no remainders. * Dividing by 4 by splitting the whole into 4 groups with no remainders. * Dividing by 4 by counting in 4s with remainders. * Dividing by 4 by splitting the whole into 4 groups with remainders. * Divide TO by 4 by chunking. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 4. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | | **8 times table**   * Count forwards and backwards in 8s and 80s. * Classify numbers based on whether they are multiples of 8 or not. * Multiply numbers by 8 within times tables. * Multiply TO by 8 using base 10 or place value counters with no exchange. * Multiply TO by 8 using a grid method with no exchange. * Multiply TO by 8 using base 10 or place value counters with exchange. * Multiply TO by 8 using a grid method with exchange. * Commutative law for 8 times table. * Bar modelling and number line representation for multiplying by 8 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 8 by counting in 8s with no remainders. * Dividing by 8 by splitting the whole into 8 groups with no remainders. * Dividing by 8 by counting in 8s with remainders. * Dividing by 8 by splitting the whole into 8 groups with remainders. * Divide TO by 8 by chunking. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 8. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | | **3 and 6 times tables**   * Count forwards and backwards in 3s and 30s, 6s and 60s. * Classify numbers based on whether they are multiples of 3 and 6 or not. * Multiply numbers by 3 and 6 within times tables. * Multiply TO by 3 and 6 using base 10 or place value counters with no exchange. * Multiply TO by 3 and 6 using a grid method with no exchange. * Multiply TO by 3 and 6 using base 10 or place value counters with exchange. * Multiply TO by 3 and 6 using a grid method with exchange. * Commutative law for 3 and 6 times table. * Bar modelling and number line representation for multiplying by 3 and 6 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 3 and 6 by counting in 3s and 6s with no remainders. * Dividing by 3 and 6 by splitting the whole into 3 and 6 groups with no remainders. * Dividing by 3 and 6 by counting in 4s and 6s with remainders. * Dividing by 3 and 6 by splitting the whole into 3 and 6 groups with remainders. * Divide TO by 3 and 6 by chunking. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 3 and 6. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | |

Summer 1

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| **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** |
| **Money**   * Coins and notes in the money system. * Using different coins to make given amounts. * Using a place value grid to show how to write money using a decimal point (£ / 10ps / 1ps). * Convert pounds to pence and pence to pounds. * Partition amounts of money into £, 10ps and 1ps. * Partition amounts of money in different ways. * Position of amounts of money on a number line with benchmarks labelled. * Position of amounts of money on a number line with only two benchmarks. * Position of the same amount of money on differently benchmarked number lines. | **Addition and subtraction of money**   * Add and subtract multiples of 100p / £1 * HTO +- O (in pence) and O.th (in pounds) without crossing 10p. * HTO +- O (in pence) and O.th (in pounds) crossing 10p. * HTO +- O (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- multiple of 10p (in pence) and O.th (in pounds) without crossing 100p / £1. * HTO +-multiple of 10p (in pence) and O.th (in pounds) crossing 100 / £1. * HTO +- multiple of 10p(in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- multiple of 100p / £1 (in pence) and O.th (in pounds) without crossing 1000p / £10. * HTO +- multiple of 100p / £1 (in pence) and O.th (in pounds) crossing 1000 / £10. * HTO +- multiple of 100p / £1 (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- TO (in pence) and O.th (in pounds) not crossing 10p or 100p / £1. * HTO +- TO (in pence) and O.th (in pounds) crossing 10p or 100p / £1. * HTO +- TO (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +- HTO (in pence) and O.th (in pounds) not crossing 10p, 100p / £1 or 1000p / £10. * HTO +- HTO (in pence) and O.th (in pounds) not crossing 10p, 100p / £1 or 1000p / £10. * HTO +- HTO (in pence) and O.th (in pounds), generating 4 addition and subtraction statements. Whole and part unknown questions. Missing number questions. * HTO +– HTO (in pence) and O.th (in pounds )using concrete materials, no exchange then exchange. * HTO +– HTO (in pence) and O.th (in pounds) using pictorial method, no exchange then exchange. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, no exchange. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, exchange in ones only. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, exchange in tens only. * HTO +– HTO (in pence) and O.th (in pounds) using expanded column method, exchange in ones and tens. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, no exchange. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, exchange in ones only. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, exchange in tens only. * HTO +– HTO (in pence) and O.th (in pounds) using contracted column method, exchange in ones and tens. * Missing number problems (whole and part unknown) HTO +-HTO (in pence) and O.th (in pounds). * Balancing equations (whole and part unknown) HTO +- HTO (in pence) and O.th (in pounds). * Number problem solving * Sort worded problems based on what is unknown. | | | **Properties of shape**   * Name the 2D shapes and label their properties (number of sides, vertical line symmetry). * Draw 2D shapes accurately using squared and isometric paper. * Sort shapes based on their properties (number of sides, regularity, vertical line symmetry). * Identify parallel and perpendicular lines in 2D shapes and label them. * Sort shapes based on parallel and perpendicular lines. * Name the 3D shapes and make them using modelling material. * Match 2D drawings to 3D shapes. * Label the properties of 3D shapes on drawings (number of edges, number of vertices, number of faces). * Sort 3D shapes based on their properties. * Identify horizontal and vertical lines in shapes. |

Summer 2

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| **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** |
| **Fractions**   * Fractions as equal parts of a whole using concrete objects – saying how many parts out of the total number of parts (unit and non unit fractions). * Fractions as equal parts of a whole using pictorial representations – saying how many parts out of the total number of parts (unit and non unit fractions). * Fractions as equal parts of a whole using bar models – saying how many parts out of the total number of parts (unit and non unit fractions). * Splitting shapes including bar models into equal parts (unit and non unit fractions). * Reading fractions from fully labelled number lines. * Reading fractions from partly labelled number lines. * Marking fractions on a number line from a pictorial representation. * Find fractions of equivalent value by folding paper and cutting objects. * Find fractions of equivalent value by drawing bar models and halving parts. * Find fractions of equivalent value by reading a fraction wall. * Show which unit fraction is bigger or by shading a picture or drawing own bar model. * Show which fraction (with the same denominator) is bigger or smaller by shading or drawing own bar model. * Order three or more unit fractions by shading pictures or drawing own bar model. * Order 3 or more fractions with the same denominator by shading pictures of drawing own bar model. * Add and subtract fractions with the same denominator within and up to one whole using Numicon. * Add and subtract fractions with the same denominator within and up to one whole using a bar model and number line. * Generate 4 addition and subtraction statements using a bar model. * Generate 4 addition and subtraction statements using a bar model where the whole or a part is unknown. * Sort missing number questions based on whether the whole or a part is unknown, then solve. * Solve balancing equations where both sides are whole unknown. * Solve balancing equations where both sides are part unknown. * Solve balancing equations where one side is part unknown and one side is whole unknown. * Calculate a unit fraction of a number by dividing into groups of the denominator – counters on a bar model. * Calculate a unit fraction of a number by dividing into groups of the denominator – jottings on a bar model. * Calculate the whole when given the unit fraction. * Calculate a non unit fraction of a number by dividing into groups of the denominator and multiplying by the numerator – counters on a bar model. * Calculate a non unit fraction of a number by dividing into groups of the denominator and multiplying by the numerator – jottings on a bar model. * Calculate the whole when given the non unit fraction. * Solve balancing equations where both sides are unit fractions (whole and part unknown). * Solve balancing equations where one side is a unit fraction and one side is a non unit fraction (whole and part unknown). * Solve balancing equations where both sides are non unit fractions (whole and part unknown). | | | | **9 times table**   * Count forwards and backwards in 9s and 90s. * Classify numbers based on whether they are multiples of 9 or not. * Multiply numbers by 9 within times tables. * Multiply TO by 9 using base 10 or place value counters with no exchange. * Multiply TO by 9 using a grid method with no exchange. * Multiply TO by 9 using base 10 or place value counters with exchange. * Multiply TO by 9 using a grid method with exchange. * Commutative law for 9 times table. * Bar modelling and number line representation for multiplying by 9 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 9 by counting in 9s with no remainders. * Dividing by 9 by splitting the whole into 9 groups with no remainders. * Dividing by 9 by counting in 8s with remainders. * Dividing by 9 by splitting the whole into 8 groups with remainders. * Divide TO by 9 by chunking. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 9. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. | | **50 times table**   * Count forwards and backwards in 50s. * Classify numbers based on whether they are multiples of 50 or not. * Multiply numbers by 50. * Commutative law for 50 times table. * Bar modelling and number line representation for multiplying by 50 (whole, number of parts, size of each parts). * Generate 4 multiplication and division statements from a bar model. * Dividing by 50 by counting in 50s with no remainders. * Dividing by 50 by counting in 50s with remainders. * Sort missing number calculations based on whether the whole, size of each part or number of parts is unknown. * Solve missing number problems. * Solve other problems related to multiples of 50. * Sort worded problems based on whether the whole, number of parts or size of each part is unknown, then solve. |