Maths Meetings non-negotiables term-by-term

The topics below must be included each term as some of the areas are **not** covered in the Mathematics Mastery units of work.

Teachers should also consult the more detailed guidelines in this document for suggested activities and other areas to include.

Term	Detail:
Autumn	Number: ◊ Count on and back from any number within 100 along a number line (vertical and horizontal) ◊ Recognise the place value of each digit in a 2-digit number (tens, ones) Shape and Pattern: ◊ Use vocabulary related to shape accurately including the number of sides, edges, vertices and faces on 2-D and 3-D shapes, including pyramids ◊ Describe position, direction and movement; including whole, half, quarter and three- quarter turns (clockwise and anti-clockwise) Measures: ◊ Introduce standard units for length ◊ Introduce degrees Celsius and reading a thermometer Time: ◊ Tell the time to the hour, half past, quarter past and to the hour Money: ◊ Coin recognition of all coins and notes (£5, £10, £20, £50) ◊ Use £ and p symbols
Spring	Number: ◊ Round numbers within 100 to the nearest ten ◊ Find simple fractions of quantities ◊ Recognise that one half is equal to two quarters Shape and Pattern: ◊ Recognise 3-D shapes including triangular prisms and cones ◊ Identify and describe the properties of 2-D shapes including polygons and quadrilaterals Measure: ◊ Introduce standard units for capacity ◊ Compare the length of objects using cm and m Time: ◊ Tell the time to the nearest five minutes ◊ Relate the multiplication table of 5 to the divisions on the clock face. Data: ◊ Interpret pictograms, tables and simple graphs
Summer	Number: ◊ Place value of numbers within 1000 ◊ Complete addition or subtraction calculations using a range of strategies and deciding which is the most efficient ◊ Use the inverse operations to solve missing number problems Measures: ◊ Introduce standard units for mass ◊ Practise reading sequences scaled in steps of 2, 5 and 10 ◊ Reading temperature on a thermometer Time: ◊ Calculating time intervals and durations Money: ◊ Solve simple problems involving the addition and subtraction of money of the same unit, including giving change

Other areas to include in Maths Meetings

	Areas to include	Suggested ideas
Calendar maths	**Autumn 1, 2, spring:** • **Days of the week** • Today is, yesterday was, tomorrow will be • **Months of the year** • This month is, last month was, next month will be • Date and year • Weather • Number patterns of 7 on the calendar • Ordering the months of the year **Summer:** • 24 hours in one day	⇒ ***Days of the Week*** **song (Adams family tune)** http://www.youtube.com/watch?v=HtQcnZ2JWsY ⇒ ***Months of the Year*** **song (found on YouTube)** http://www.youtube.com/watch?v=5enDRrWyXaw ⇒ *What's the Weather* song (several versions are available on YouTube) ⇒ Today is Monday the 11th – what will the date be next Monday? What was the date last Monday? ⇒ Collate and compile weather data using a bar chart ⇒ Identifying the first, fifth, tenth, etc. month of the year
Data handling	**Autumn 1 & autumn 2:** • Sort using a Venn diagram and Carroll diagram • Represent addition and subtraction using a bar model • Data handling e.g. travel to school, lunches **Spring & summer:** • Construct and interpret pictograms, tables and simple graphs • Ask and answer simple questions about totalling and comparing categorical data	⇒ Sort everyday items or toys using a Venn diagram ⇒ Use straws to represent how many Maths Meetings have taken place. Show these in the 'ones' column on your place value board ⇒ Whole class word problems involving bar modelling ⇒ Read and interpret TV schedules, bus or train timetables, etc.

	Areas to include	Suggested ideas
Shape and pattern	**Autumn 1 & autumn 2:** • Use vocabulary related to shape accurately, including the number of sides, edges, vertices and faces • Copy, continue and make patterns by colour, size and shape • Recognise common 2-D shapes, including rectangles, squares, triangles and circle • Recognise common 3-D shapes, including cuboids, cubes, pyramids and spheres • Describe position, direction and movement, including whole, half, quarter and three-quarter turns (clockwise and anti-clockwise) **Spring:** • Order and arrange combinations of mathematical objects in patterns and sequences • Recognise common 3-D shapes, including triangular prisms, cones, cuboids, cubes, pyramids and spheres • Identify and describe the properties of common 2-D shapes including polygons and quadrilaterals **Summer:** • Identify right angles in relation to shapes and everyday objects and in relation to quarter turns • Identify 2-D shapes on the surface of 3-D shapes • Identify and describe the properties of common 2-D shapes including the number of sides and line symmetry in a vertical line • Identify and describe the properties of common 3-D shapes including the number of edges, vertices and sides	⇒ Feely bag of shapes ⇒ Pattern of the day using 3 criteria. Discuss and continue the pattern in your Maths Meeting ⇒ Use class photo or Big Pictures to describe positions ⇒ Use a grid and give directions to guide an object from one corner to another using whole, half, quarter and three quarter turns and mapping out the path taken ⇒ Use a grid to give directions and guide an object from point A to point B

	Areas to include	Suggested ideas
Number	**Autumn 1 & 2:** • **Say cardinal numbers' names in order within 100** • **Numbers to 100** • **Patterns of numbers within 100** • **Skip counting in steps of 2, 3, 5 and 10 forwards and backwards** • Count on and back from any number within 100 along a number track (vertical and horizontal) • Order numbers within 100, in increasing and decreasing order, on a number line (vertical and horizontal) • Addition and subtraction using the 'make ten' strategy and the column method • Recognise the place value of each digit in a two-digit number (tens, ones) • Count on and back in tens from any number within 100 • **Numbers to 1000** • Recall and use addition and subtraction facts to 20 and derive and use related facts up to 100 • Addition and subtraction of 2-digit numbers mentally **Spring:** • **Skip counting in steps of 2, 3, 4, 5, 50 and 100** • **Multiplication tables of 2, 5 and 10** • Create equations for a given set of numbers • Solve one- and two-step word problems • Practise the commutative property with addition equations • Round numbers within 100 to the nearest ten • Find simple fractions of quantities • Recognise that one half is equal to two quarters **Summer:** • Read and write numbers up to 1000 in numerals and words • Compare and order numbers up to 1000 • Count on and back in hundreds from any number within 1000 • Place value of digits in numbers within 1000 • **Multiplication tables of 2, 3, 4, 5 and 10** • Addition and subtraction of two and three digit numbers mentally (using strategies from Unit 8) • Use inverse operations to solve missing number problems • Recognise when a shape is divided into equal parts • Recognise when a shape is divided into halves, quarters and thirds • Finding related facts with one half, one quarter and one third	⇒ **Number or counting songs and rhymes** ⇒ 'Pass the teddy' – a teddy is passed around the class and each child must say 2, 5 or 10 more or less than the previous number ⇒ Use a hundred square to show patterns within 100 ⇒ 100 square puzzle – show one part of the hundred square with only 2 or 3 numbers showing. The children must fill in the remaining numbers ⇒ Number of the week – count on and back in fives to and from our number; how many tens and ones?, etc. ⇒ Guess my number: it is odd, it has 6 in the tens column, it has a digit total of 9, etc. ⇒ Missing number: 36, 39, ___, 45 ⇒ Teacher writes three or four addition or subtraction equations on the board, ensuring one of them is wrong. The children must work out which one it is within a given time ⇒ Select three numbers that would form an addition or subtraction equation and ask pupils what the equations could be ⇒ 5 + 3 = 8 therefore 50 + 30 = 80. What would 56 + 30 be equal to? ⇒ Solving number problems such as half of 4 = 2, therefore half of 40 = 20 and half of 400 = 200 ⇒ Use flags as a basis for identifying how much of each flag is shaded in a particular colour, for example, the French flag has three colours. Is each colour one third of the flag? Print the flag on squared paper and check

	Areas to include	Suggested ideas
Measures: capacity and volume, length and weight	**Autumn 1:** • Measure capacity, length and weight using non-standard units • Compare capacity, length and weight in non-standard units using a variety of containers and objects **Autumn 2:** • Estimate and calculate length using standard units • Estimate and calculate capacity, length and weight using non-standard units • Compare and record lengths using <, > and = signs **Spring:** • Compare the length of objects using cm and m • Find objects that are measured in cm and m **Summer:** • Practise reading scales in steps of two, five and ten • Compare the length, weight and capacity of objects using cm and m; g and kg; and ml and l • Find objects that are measured in cm and m; g and kg; and ml and l • Estimate and calculate capacity, length and weight using standard units	⇒ Use everyday items from the classroom e.g. drink bottles, pencils, school bags, etc. ⇒ Which is bigger, longer, heavier? How do you know? How could we check? ⇒ What units of measurement will we use? ⇒ Create a metre/centimetre; board where pupils bring in items and add them to the relevant board ⇒ Which is bigger, longer, heavier? How do you know? How could we check? ⇒ What units of measurement will we use?
Money	**Autumn 1:** • Coin and note recognition: 1p, 2p, 5p, 10p, 20p, 50p, £1, £2, £5, £10, £20, £50 • Represent a given amount in different ways • Give change **Autumn 2:** • Coin and note recognition of all denominations • Use £ and p symbols • Combine amounts to make a particular value • Find different combinations of coins that equal the same amount • Addition and subtraction of money including giving change **Spring and summer:** • Solve simple word problems involving the addition and subtraction of money of the same unit, including giving change (adding pounds and pence separately)	⇒ Missing coin or note: all the children close their eyes while the teacher removes one coin or note. Children must guess which one is missing. *Variation:* remove 2 or 3 coins or notes and children must work out how much money is missing

	Areas to include	Suggested ideas
Time	**Autumn 1:** • Tell the time to the hour and half past the hour • Sequence events in chronological order using language: before, after, next, first, today, yesterday, tomorrow, morning, afternoon and evening **Autumn 2:** • Tell the time to the hour, half past and quarter past and to the hour • Discuss events using vocabulary: fortnight, noon, day before yesterday, day after tomorrow **Spring:** • Connect the multiplication table of five to the divisions on the clock face **Summer:** • Time a Maths Meeting and record its duration • Compare durations of Maths Meetings at the end of every week • Tell the time to the nearest five minutes • Calculate what the time will be in 10/15 minutes	⇒ Time song: *"Ticker, ticker, ticker, tick. What time is it? Aha! Ticker, ticker, ticker, tock. What time is it? Aha! Stop!"* ⇒ Sequence familiar stories, e.g. Cinderella, using specific language: first, last, before, after, next ⇒ Sequence the events of the day using language: morning, afternoon and evening