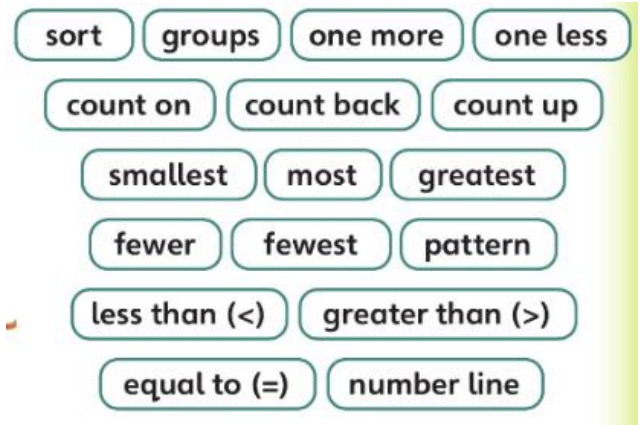
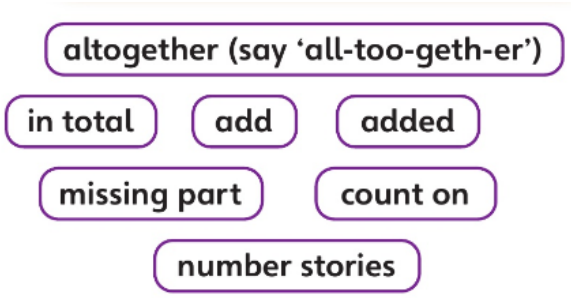
BILSTON CHURCH OF ENGLAND PRIMARY

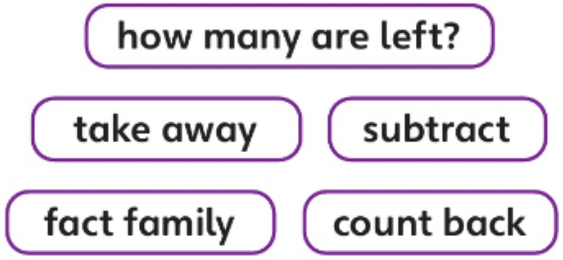
MEDIUM TERM PLANNING

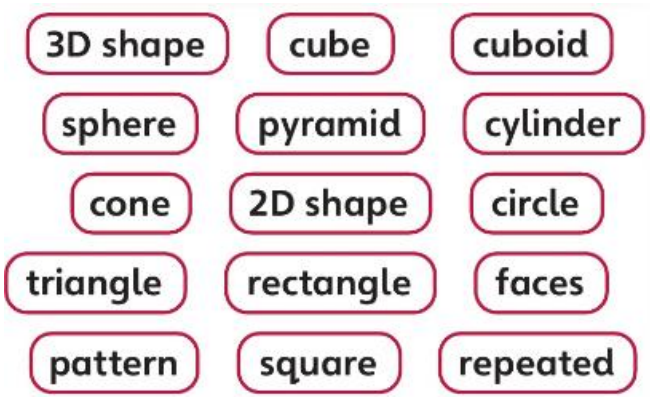
Subject	Year Group	Term
Maths	1	Autumn

Topic	National Curriculum Objectives	Power Maths Unit	NCETM Professional development documents	Ready to progress Criteria
Number and Place Value (Approximately 3 weeks in duration)	• Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. • count to and across 100, forwards and backwards, beginning with 0 or 1 • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Count, read and write numbers to 100 in numerals; count in multiples	• Power Maths Unit 1 	• Spine 1 Number Addition and Subtraction 1.1 comparison of quantities and measure • *'The ___ is heavier than the ___.'* • *'The ___ is lighter than the ___.'* • *'The ___ is the same length as the ___.'* • *'The ___ is the same weight as the ___.'* 1.2 introducing 'whole' and 'parts': part-part-whole ***'This is a whole ___, because I have all of it.'*** This leads to the stem sentence: ***'This is not a whole ___ because I don't have all of it.'*** ***'There are ___ ___ in the whole group.'*** ***'There are ___ in this part of the 'One, two... There are ___ objects.'*** 1.3Composition of number 0-5	• INPV-1 Count within 100, forwards and backwards, starting with any number. • INPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =

	of twos, fives and tens. ● Read and write numbers from 1 to 20 in numerals and words. ● Given a number, identify one more and one less		*'The 5 represents all the counters.'* *'The ___ represents the ___ blue counter(s).'* *'The ___ represents the ___ red counter(s).'* 1.4composition of number 0-10 *'___ is made of (a) pair(s); it is an even number.'* *'___ is not made of pairs; it is an odd number.'* *'___ is the whole; ___ is a part; ___ is a part.'* *'___ is a part; ___ is a part; ___ is the whole.'*	
Addition and Subtraction (Approximately 2 weeks in duration)	● represent and use number bonds and related subtraction facts within 20 ● Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. .	● Power Maths unit 2 group part whole number sentence part-whole model in total altogether plus	● Spine 1 Number Addition and Subtraction ● 1.2 introducing parts and whole *'There are ___ ___ in the whole group.'* *'There are ___ ___ in this part of the group.'* *'There are... and...'* *'We can write this as ___ plus ___.'* *'The ___ represents the...'* *'The ___ represents the...'* ● 1.5 additive structures *'___ is equal to ___ plus ___.'* *'___ plus ___ is equal to ___.'* *'___ and ___ are the addends.'* *'___ is the sum.'* *There are... and...'* *We can write this as ___ plus ___.'* *The ___ represents the...'* *The ___ represents the...'* ● 1.6 Additive structures: introduction to augmentation and reduction ***first..., then..., now...***	● 1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. ● 1AS–2 Read, write and interpret equations containing addition (+), subtraction (–) and equals (=) symbols, and relate additive expressions and equations to reallife contexts.

			• 1.7 addition strategies within 10 ***'The 1 means one ten and the ___ means ___ one(s).'***	
Addition and Subtraction (approximately 1 week in duration	• Using quantities and objects, children add and subtract 2 single-digit numbers and count on or back to find the answer • represent and use number bonds and related subtraction facts within 20 • Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. • • 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	• Power Maths Unit 3)  	• Spine 1 • 1.2 Parts and whole ***'This is a whole ___, because I have all of it.'*** This leads to the stem sentence: ***'This is not a whole ___ because I don't have all of it.'*** ***'There are ___ ___ in the whole group.'*** ***'There are ___ ___ in this part of the group.'*** • 1.5 additive structures (partitioning) ***'There are... and...'*** ***'We can write this as ___ plus ___.'*** ***'The ___ represents the...'*** ***'The ___ represents the...'*** ***'___ is equal to ___ plus ___.'*** ***'___ plus ___ is equal to ___.'*** ***'___ and ___ are the addends.'*** ***'___ is the sum.'*** • 1.6 additive structures augmentation and reduction ***first..., then..., now...*** • 1.7 addition strategies within 10 • ***'One more than ___ is ___.'*** • ***'One less than ___ is ___.'***	• INF–1 Develop fluency in addition and subtraction facts within 10. • IAS–2 Read, write and interpret equations containing addition (+), subtraction (–) and equals (=) symbols, and relate additive expressions and equations to reallife contexts.

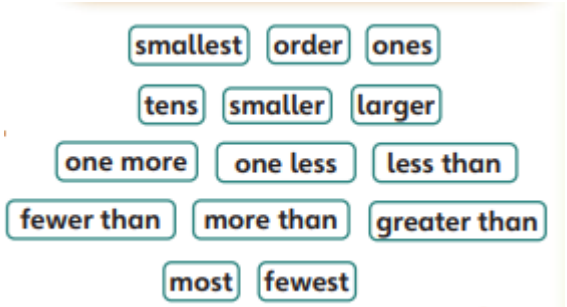
	increasing knowledge of mental and written methods. • Add and subtract one-digit and two-digit numbers to 20, including zero			
Addition and subtraction (approximately 2 weeks in duration)	• Using quantities and objects, children add and subtract 2 single-digit numbers and count on or back to find the answer • represent and use number bonds and related subtraction facts within 20 • Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. • Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ♦ – 9. • Add and subtract one-digit and two-digit numbers to 20, including zero. • Solve problems with addition and subtraction: - using concrete	• Power Maths Unit 4 	• 1.6 additive structures augmentation and reduction ***first..., then..., now...*** • 1.7 addition strategies within 10 • ***'One more than ___ is ___.'*** • ***'One less than ___ is ___.'***	• INF–1 Develop fluency in addition and subtraction facts within 10. • IAS–2 Read, write and interpret equations containing addition (+), subtraction (–) and equals (=) symbols, and relate additive expressions and equations to reallife contexts.

	objects and pictorial representations, including those involving numbers, quantities and measures – applying their increasing knowledge of mental and written methods.			
Properties of Shape (approximately 8 days in duration)	• Children explore characteristics of everyday objects and shapes and use mathematical language to describe them. • Recognise and name common 2D and 3D shapes, including: – 2D shapes (for example, rectangles (including squares), circles and triangles) – 3D shapes (for example, cuboids (including cubes), pyramids and spheres).	• Power Maths Unit 5 	•	• IG–1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. • IG–2 Compose 2D and 3D shapes from smaller shapes to match an

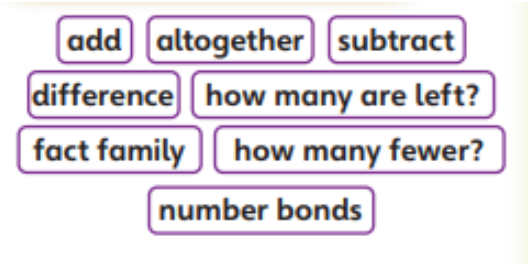
	• Children recognise, create and describe patterns. • Compare and sort common 2D and 3D shapes and everyday objects.			example, including manipulating shapes to place them in particular orientations.

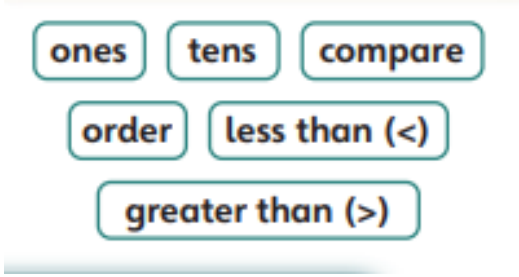
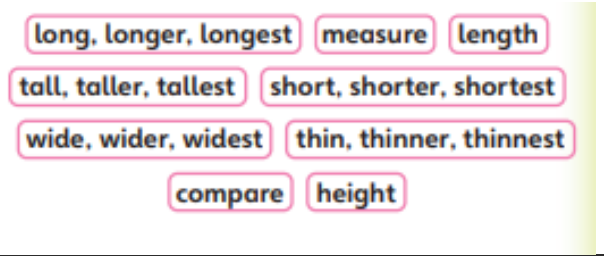
MEDIUM TERM PLANNING

Subject	Year Group	Term
Maths	1	Spring

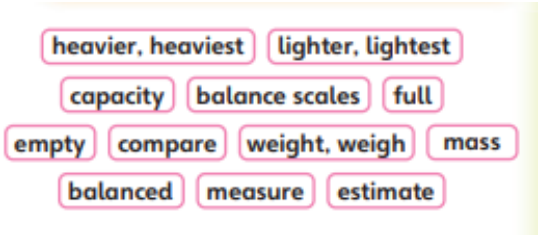
Topic	• National Curriculum Objectives	• Power Maths Unit	• NCETM Professional development documents	• Ready to progress Criteria
Numbers to 20 Counting and writing numbers Place value (tens and ones) (approximately 12 days in duration)	• Children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. ● Identify and represent numbers	• Power Maths unit 6  •	Spine 1 1.9 Composition of numbers 20-100 structure. Return to the representation in digits, emphasising that the digits are written in the order that the parts of the name are spoken, using the stem sentence: ***'This is the number ___. We write the ___ then the ___.'*** For example: 42 • ***'___ is between ___ and ___.'*** • ***'___ is the previous multiple of ten.'*** • ***'___ is the next multiple of ten.'*** ***'There are ___ tens, which is ___, and ___ one(s), which is ___. This makes ___ altogether.'*** ***'The ___ represents ___ tens; it has a value of ___.'*** ***'The ___ represents ___ one(s); it has a value of ___.'***	• INPV–1 Count within 100, forwards and backwards, starting with any number. • INPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =

	using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. ● Read and write numbers from 1 to 20 in numerals and words. ●Recognise the place value of each digit in a two-digit number (tens, ones). ●. Given a number, identify one more and one less. • ●Compare and order numbers from 0 up to 100; use and = signs.		• T.10 Composition of numbers 11-19 ***'The 1 means one ten and the ___ means ___ one(s).'*** Use the stem sentence: ***'___ is equal to ten plus ____.'*** ***'We know the number ___ is odd/even because the ones digit is odd/even.'*** ***'A number is odd if the ones digit is odd. It can't be made from groups of two.'*** ***'A number is even if the ones digit is even. It can be made from groups of two.'***	

Addition and subtraction within 20 (approximately 11 days in duration)	• read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9 • Using quantities and objects, children add and subtract 2 single-digit numbers and count on or back to find the answer. • 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.	• Power Maths unit 7  	• 1.5 additive structures (partitioning) ***'There are... and...'*** ***'We can write this as ___ plus ___.'*** ***'The ___ represents the...'*** ***'The ___ represents the...'*** ***'___ is equal to ___ plus ___.'*** ***'___ plus ___ is equal to ___.'*** ***'___ and ___ are the addends.'*** ***'___ is the sum.'*** •	• 1AS–2 Read, write and interpret equations containing addition (+), subtraction (–) and equals (=) symbols, and relate additive expressions and equations to reallife contexts.
Place value (approximately 11 days in duration)	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	• Power Maths unit 8	Spine 1 1.9 Composition of numbers 20-100	• 1NPV–1 Count within 100, forwards and backwards, starting with any number.

	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tensCount up to 50 • Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. • Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. • Compare and order numbers from 0 up to 100; use < >and = signs. • Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward (2).		structure. Return to the representation in digits, emphasising that the digits are written in the order that the parts of the name are spoken, using the stem sentence: ***'This is the number ___ . We write the then the .'*** Fo ***'There are ___ tens, which is ___, and ___ one(s), which is ___. This makes ___ altogether.'*** • ***'The ___ represents ___ tens; it has a value of ___.'*** • ***'The ___ represents ___ one(s); it has a value of ___.'***	• INF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers. IAS–2 Read, write and interpret equations containing addition (+), subtraction (–) and equals (=) symbols, and relate additive expressions and equations to reallife contexts.
Measurement Length and Height	• Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	• Power Maths unit 9 	• Spine 1 1.1 comparison of quantities and measure • ***'The ___ is the same length as the ___.'*** • ***'The ___ is the same weight as the ___.'***	•

(approximately 1 week in duration)	• Compare, describe and solve practical problems for: - lengths and heights (for example, long/short, longer/shorter, tall/short, double/half) - mass/weight (for example, heavy/light, heavier than, lighter than) - capacity and volume (for example, full/empty, more than, less than, half, half full, quarter) - time (for example, quicker, slower, earlier, later). • 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. • Solve one-step problems that involve addition	(		

	and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ♦ – 9. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =.			
Measurement Weight and Volume (approximately 9 days in duration)	• Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. • Compare, describe and solve practical problems for: – lengths and heights (for example, long/short, longer/shorter, tall/short, double/half) – mass/weight (for example, heavy/light, heavier than, lighter than) – capacity and volume (for example, full/empty, more than, less than, half, half full, quarter) – time (for example, quicker, slower, earlier, later). • Measure and begin to record the following: – lengths and heights – mass/weight – capacity and	• Power Maths 11  	• Spine 1 1.1 comparison of quantities and measure • ◦ ***'The ___ is heavier than the ___.'*** ◦ ***'The ___ is lighter than the ___.'*** ◦ ***'The ___ is the same length as the ___.'*** ◦ ***'The ___ is the same weight as the ___.'***	•

	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. • Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ♦ – 9. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =.			

MEDIUM TERM PLANNING

Subject	Year Group	Term
Maths	1	Summer

Topic	• National Curriculum Objectives	• Power Maths Unit	• NCETM Professional development documents	• Ready to progress Criteria
Place Value Multiplication and division (approximately 2 weeks)	• Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens (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 (2, 5 and 10). • 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 • Understand multiplication and division through grouping and sharing quantities.	• Power Maths unit 12 **equal groups array row** **column double twice** **share**	Spine 1 1.8 Composition of numbers: multiple of 10 up to 100 ***'Ten ones are equal to one ten.'*** ***'We have one group of ten.'*** ***'We have one ten.'*** ***'This is the number ___. The ___ represents ___ tens.'*** ***'All multiples of ten end with a zero.'*** ***'We have ___ tens. We call this ___.'*** ***'This is ___. Ten more than ___ is ___.*** ***___ is ten more than ___.'*** ***'This is ___. Ten less than ___ is ___.*** ***___ is ten less than ___.'***	• INF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.

			Spine 2 2.1 Counting, unitizing and coins	
Multiplication and Division (5 days)	• 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. • Children solve problems, including doubling, halving and sharing. •	• Power Maths unit 13 **equal groups array row** **column double twice** **share**	Spine 2 2.1 Counting, unitizing and coins	•
Fractions	• 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. • Children solve problems, including doubling, halving and sharing.	• Power Maths unit 14 **half halves quarter**	•	•
Position and Direction	Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. Describe position, direction and movement including half, quarter and three quarter turns.	Power Maths unit 15 **turn half turn quarter turn** **three-quarter turn whole turn position** **left right forwards backwards** **above below top middle bottom** **up down in between**		

	Order and arrange combinations of mathematical objects in patterns and sequences			
Number and Place Value	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. ● Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. ● Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Read and write numbers to at least 100 in numerals and in words 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 >and = signs	Power Maths unit 16 **100 square** **number square** **place value grid**	Spine 1 1.1-1.10	

Measurement Money	Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. Recognise and know the value of different denominations of coins and notes. Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	Power Maths Unit 17 **pound** **pence** **coins** **notes** **p**	Spine 2 2.1 Counting, unitizing and coins Encourage children to use the following stem sentence: ***'There are ___ one-penny coins; the total value is ___ p.'*** ***'This is a ___-pence coin. It has a value of ___ p.'*** ***'I say two pence, but I think two one-pennies.'*** ***'I say five pence, but I think five one-pennies.'*** ***'I say ten pence, but I think ten one-pennies.'*** • ***'There are ___ coins.'*** • ***'Each coin has a value of ___ p.'*** • ***'This is ___ p.'*** ***'The ___ costs ___ p.'*** ***'Each coin has a value of ___ p.'*** ***'So I need ___ coins.'***	
Measurement Time	Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. Sequence events in chronological order using language (for example, before and	Power Maths Unit 18 **before** **after** **yesterday** **today** **tomorrow** **day** **week** **slower** **faster** **month** **year** **calendar** **date** **minute hand** **hour hand** **o'clock** **half past** **second** **minute** **hour**		

	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. Measure and begin to record the following: - lengths and heights - mass/weight - capacity and volume - time (hours, minutes, seconds). Compare, describe and solve practical problems for: - lengths and heights (for example, long/short, longer/shorter, tall/short, double/half) - mass/weight (for example, heavy/light, heavier than, lighter than) - capacity and volume (for example, full/empty, more than, less than, half, half full, quarter) - time (for example, quicker, slower, earlier, later).			

	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ◆ − 9.			