Year 2 Medium term plan: autumn term

EVERY DAY: Practise and develop oral and mental skills (e.g. counting, mental strategies, rapid recall of + and – facts)	
Say the number names to at least 100	Say the number that is one or ten more/less than a two-digit number
Count on or back in ones and tens from any number up to 100	Recall multiplication facts of 10 times-table
Read and write, words and figures, numbers to 50	Recall addition and subtraction facts for each number up to 10
Count in 100s from/back to 0.	Recall doubles to 10+10 and corresponding halves
Count on from zero in steps of 2 and 5.	Recall all pairs with a total of 20

Days	Topic	Objectives: children will be taught to
5	**NUMBER** **Number, place value and rounding**	Order two digit numbers and position them on a number line; use the greater than (>) and less than (<) signs. Count reliably up to 100 objects by grouping them in tens. Read and write whole numbers from 0 to 50 in figures and words. Know what each digit in a two-digit number represents including 0 as place holder. Say the number that is one or ten more/less than a given two-digit number. Partition two-digit numbers into a multiple of 10 and ones.
10	**NUMBER** **Addition and Subtraction** Understanding + and – Mental calculation strategies (+ –) Money and 'real life' problems Making decisions checking results	Understand the operations of addition and subtraction; recognise that addition can be done in any order but not subtraction. Use +, - and = signs to record mental calculations in a number sentence. Add/subtract by adjusting (add/subtract 9 or 11 by adding/subtracting 10 and adjusting by 1). Identify near doubles, using doubles already known. Recognise all coins. Find totals. Choose and use an appropriate number operation and calculation strategy to solve simple word problems. Explain method orally. Record in number statement, using +, - and = signs.
6	**MEASURES** **Length** **Mass** **Time**	Use units of time: second, minute, hour, day, week. Suggest suitable units to estimate or measure time. Estimate, measure then compare lengths using metres. Estimate, measure then compare masses using kilograms; and grams. Suggest suitable units and equipment for such measurements.
5	**GEOMETRY** **Properties of Shape**	Use mathematical names for common 3-D and 2-D shapes (+quadrilateral) – including polygons (2d straight sides) and non-polygons. Identify and describe the properties of 2-D and 3-D shapes. Make and describe shapes, patterns or pictures using solid shapes and templates. Compare and sort common 2-D and 3-D shapes. Relate solid shapes to pictures of them. Identify 2-D shapes on the surface of 3-D shapes, e.g. circle on a cylinder. Investigate general statements about shapes.

Count on or back in ones/tens from any number up to 100	Recall addition and subtraction facts for each number up to 10
Count in 100s from and back to zero	Recall all pairs with a total of 20
Recall doubles to 10+10 and corresponding halves.	Add 9 or 11. Subtract 9 or 11
Derive near doubles	Recall multiplication facts and derive division facts for x10 table
Count on from zero in steps of 2 and 5.	Recognise odd and even numbers

Days	Topic	Objectives
5	**NUMBER** **Patterns of Number** Number Sequences Odd and Even	Describe and extend number sequences. Recognise odd, even numbers and two-digit multiples of 2 to 100. Solve mathematical problems/puzzles, recognise simple patterns and relationships and make predictions. Suggest extensions. Place numbers on number line or 100 square. Use and begin to read the vocabulary of comparing and ordering numbers, including ordinal numbers to 100.
5	**NUMBER** **Addition and Subtraction** Understanding + and – Mental calculation strategies (+ –) Money and 'real life' problems Making decisions checking results	Use patterns of similar calculations Find small difference, counting up Use £/p notation. Recognise notes of different values Choose and use appropriate number operation and calculation strategy to solve simple word problems. Explain method.

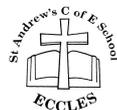| 8	**NUMBER** **Multiplication and Division** Understanding x and ÷ Mental calculation strategies (x ÷) Money and 'real life' problems Making decisions checking results	Understand multiplication as repeated addition. Use the related vocabulary. Use x and = signs and ℘ to stand for unknown number. Use known facts to carry out simple multiplication. Understand division as grouping or sharing. Read the related vocabulary. Use x, ÷ and = signs to record mental calculations. Add, multiply and divide mentally to solve simple word problems. Choose and use an appropriate number operation and calculation strategy to solve simple word problems. Explain method orally. Record in number statement, using x and = signs.
3	**NUMBER** **Fractions**	Recognise, name and write one quarter and three quarters parts of an object, shape or quantity
4	**MEASURES** **Time**	Solve problems involving length, mass or time. Order months of the year. Read time to hour and half hour on analogue or 12-hour digital clock.
3	**STATISTICS**	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer questions about data.

Year 2 Medium term plan: spring term

EVERY DAY: Practise and develop oral and mental skills (e.g. counting, mental strategies, rapid recall of + and – facts)	
Read and write, words and figures, numbers to 100 Partition a two digit number into tens and ones Recall doubles to 10+10 and corresponding halves Count in 100s from and back to zero Count on from zero in steps of 2 and 5.	Recall pairs with a total of 20 Add 9 or 11. Subtract 9 or 11. Recall multiplication facts of x10 and x2 table, deduce division facts. Recognise odd and even numbers Count in steps of 3 from and back to zero up to 30.

days	Topic	Objectives: children will be taught to
4	**NUMBER** **Number, place value and rounding** Counting and estimating	Recognise two-digit multiples of 2, 5 and 10. Compare two two-digit numbers, say which is more or less. Count up to 100 objects by grouping in tens, then fives or twos. Give a sensible estimate of up to 50 objects.
10	**NUMBER** **Addition and Subtraction** Understanding + and – Mental calculation strategies (+ –) Money and 'real life' problems Making decisions, checking results	Add more than two numbers, eg add three small numbers by putting the largest first and/or finding a pair that make 10. Partition into 5 and a bit when adding 6, 7, 8 or 9. Find totals of amounts of money and 'real life' word problems (one step). Choose and use an appropriate number operation and mental strategy to solve money and 'real life' word problems (one step). Check results. Explain methods orally. Record results in number statement, using +, -, =
5	**MEASURES** **Length** **Time** **Capacity**	Use a ruler to measure and draw lines to the nearest cm. Estimate, measure then compare capacities using litres and millilitres. Suggest suitable units and equipment for such measurements. Recognise relationships between second, minute, hour, day, week.
6	**GEOMETRY** **Properties of Shape** **Position, direction and movement**	Make and describe shapes (e.g. using pin-boards, elastic boards, squared paper and programmable toy). Recognise line symmetry. Use mathematical vocabulary to describe position and direction. Recognise whole, half,quarter and three quarter turns, left, right, clockwise and anti-clockwise. Solve shape puzzles, explaining reasoning orally.

Read and write, words and figures, numbers to 100 Count on from zero in steps of 2 and 5. Say number that is 10 more/less than any two-digit number Derive doubles to 15+15 and corresponding halves Know 2 times-table and derive division facts.	Recall all pairs that make 20 (eg 13+7, 20-12) Recall pairs of multiples of 10 that make 100 State subtraction fact corresponding to addition fact and vice versa. Know x10 table and derive division facts. Count in halves and quarters to 10.

days	Topic	Objectives
2	**NUMBER** **Patterns of Number** Number Sequences	Describe and extend number sequences Give examples to match general statement about numbers.
8	**NUMBER** **Addition and Subtraction** Understanding + and – Mental calculation strategies (+ –) Money and 'real life' problems Making decisions, checking results	Bridge through 10, then 20 and adjust. Add two then three two-digit numbers with apparatus State subtraction fact corresponding to addition fact and vice versa. Find totals, give change and work out how to pay. Choose and use an appropriate number operation and mental strategy to solve money and 'real life' word problems (one step). Check results. Explain methods orally. Record result in number statement, using +. -. =.
5	**NUMBER** **Multiplication and Division** Understanding x and ÷ Mental calculation strategies (x ÷) Money and 'real life' problems Making decisions,checking results	Understand division as grouping or sharing. Read the related vocabulary. Use x, ÷ and = signs to record mental calculations. Recognise and use ℘ to stand for an unknown number. Use known number facts and place value to divide mentally. Choose and use an appropriate number operation and mental strategy to solve money and 'real life' word problems (1 or 2 steps). Check results. Explain methods orally. Record result in number statement.
3	**NUMBER** **Fractions**	Recognise, name and write fractions one quarter, one third, one half, two thirds and three quarters of a whole.
3	**MEASURES** **Time**	Solve simple problems involving capacity or time. Read time to quarter hour on analogue or 12-hour digital clock.
3	**STATISTICS**	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer questions about data.

St Andrew's **Mathematics** *Framework 2014*

Year 2 Medium term plan: summer term

EVERY DAY: Practise and develop oral and mental skills (e.g. counting, mental strategies, rapid recall of + and – facts)	
Recognise multiples of 2, 5 and 10. State subtraction fact corresponding to addition fact and vice versa. Derive doubles of multiples of 5, halves of multiples of 10 Recall x2, x5 and x10 tables and corresponding division facts. Recognise odd and even numbers.	Recall all pairs that make 20 Recall pairs of multiples of 10 that make 100 Understand that halving is the inverse of doubling and derive and recall doubles of all numbers to 20 and corresponding halves. Count in steps of 4 from and back to zero up to 40.

days	Topic	Objectives: children will be taught to
3	**NUMBER** **Number, place value and rounding**	Compare two two-digit numbers, say which is more or less, and give a number that lies between them. Order whole numbers and place them on a number line or 100-square. Round numbers less than 100 to the nearest 10
12	**NUMBER** **Addition and Subtraction** Understanding + and – Mental calculation strategies (+ –)Money and 'real life' problems Making decisions, checking results	Use □ or ? to stand for an unknown number. Understand subtraction as inverse of addition. Use number facts and place value to add/subtract mentally. Add and subtract numbers with up to 2 digits using column addition without carrying and column subtraction without exchanging. Choose and use appropriate operations and calculation strategies to solve one ad two step word problems (including money) using + and – and one step problems using x and ÷. Check results. Explain orally and record result in a number sentence.
5	**MEASURES** **Temperature** **Length**	Read a scale to the nearest division. Read the numbered divisions on a scale, and interpret the divisions between them., e.g. on a scale form 0-25 with intervals of 1 shown but only the divisions 0, 5, 10, 15 and 20 numbered. Choose and use appropriate standard units to estimate and measure temperature. (Introduce concept of –ve numbers). Estimate, measure then compare lengths using centimeters and millimetres.
5	**GEOMETRY** **Properties of Shape** **Position, direction and movement**	Use mathematical vocabulary to describe position, direction and movement. Recognise right angles. Give instructions to move along a route. Order and arrange combinations of mathematical objects in patterns. Use a ruler to draw polygons accurately Investigate a general statement about shapes.

State subtraction fact corresponding to addition fact and vice versa Add/subtract 9, 19, 11, 21 Derive doubles of multiples of 5, halves of multiples of 10 Count in halves and quarters to 10. Recognise the value of each digit in a 3-digit number.	Recall addition and subtraction facts for each number up to at least 10. Recall pairs that make 20. Recall pairs of multiples of 10 with a total of 100 Count on in 3s or 4s to at least 30, from and back to any small number. Recall x2, x5 and x10 tables and corresponding division facts.

days	Topic	Objectives
3	**NUMBER** **Patterns of Number**	Solve problems, recognise patterns and relationships, generalise. Order whole numbers to at least 100; use the greater than (>) and less than (<) signs. .
10	**NUMBER** **Addition and Subtraction** Understanding + and – Mental calculation strategies (+ –) Money and 'real life' problems Making decisions	Use number facts to add/subtract a pair of numbers within range 0 to 20. Add/subtract by adjusting (add/subtract 19 or 21 by adding 20 then adjusting). Bridge through a multiple of 10 when adding a single-digit number. Choose and use appropriate operations and calculation strategies to solve one and two step word problems (including money) using + and -, and one step problems using x and ÷. Check results. Explain orally and record method in a number statement. Know all coins, find totals and give change.
5	**NUMBER** **Multiplication and Division** Understanding x and ÷ Mental calculation strategies (x ÷) Money and 'real life' problems Making decisions, checking results	Know and use halving as the inverse of doubling. Use known number facts and place value to carry out multiplication and division mentally. Use practical and informal methods and related vocabulary to support multiplication and division, including calculations with remainders. Choose and use appropriate operations and calculation strategies to solve one and two step word problems (including money) using + and – and one step problems using x and ÷. Check results. Explain orally and record method.
3	**NUMBER** **Fractions**	Recognise, name and write fractions one quarter, one third, one half, two thirds and three quarters of a whole.
3	**MEASURES** **Time**	Solve simple problems involving time. Read time to five minute intervals on analogue and 12-hour digital clocks.

| 3 | **STATISTICS** | Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
Ask and answer questions about data. |