

A high-quality mathematics education ... provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.”

(The New national curriculum in England framework document, July 2013)

Year 4	Autumn 1	
Prior Learning	Key Vocabulary	
Objectives	When else will objective be covered	
<u>Number and Place Value</u> <ol style="list-style-type: none"> 1. Count backwards through zero to include negative numbers 2. Count in multiples of 6, 7, 9, 25 and 1000 3. Find 1000 more or less than a given number 4. Order and compare numbers beyond 1000 5. Identify, represent and estimate numbers using different representations 6. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens, and ones) 7. Round any number to the nearest 10, 100 or 1000 8. Solve number and practical problems that involve all of the above and with increasingly large positive numbers 	Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 9. Add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate. 10. Estimate and use inverse operations to check answers to a calculation 11. Solve addition and subtraction two-step problems in contexts, deciding which operations 	Core Objective Core Objective Core Objective	

and methods to use and why	
<u>Multiplication and Division</u> 12. Recall multiplication facts for multiplication tables up to 12 x 12 13. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers 14. Recognise and use factor pairs and commutatively in mental calculations	Core Objective Core Objective Core Objective
<u>Fractions including decimals and percentages</u> 15. Count up and down in hundredths 16. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten 17. Recognise and show using diagrams, families of common equivalent fractions 18. Recognise and write common equivalent fractions 19. Solve simple measure and money problems involving fractions and decimals to two decimal places	Core Objective Core Objective Autumn 1, 2 Autumn 1, 2 Core Objective
<u>Measurement</u> 20. Estimate, compare and calculate different measures , including money in pounds and pence 21. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres 22. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days 23. Read, write and convert time between analogue and digital 12 and 24 hour clocks	Core Objective Autumn 1, 2 Core Objective Core Objective
<u>Geometry</u> 24. Identify lines of symmetry in 2D shapes presented in different orientations 25. Complete a simple symmetric figure with respect to a specific line of symmetry 26. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes 27. Identify acute and obtuse angles and compare and order angles up to two right angles by size	Autumn 1, 2 Autumn 1, 2 Autumn 1, 2 Autumn 1, 2
<u>Statistics/Data</u> 28. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Core Objective

29. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Core Objective
<u>Algebra</u> 30. Perimeter can be expressed algebraically as $2(a+b)$ where a and b are the dimensions in the same unit	Core Objective

Medium Term Plan				
Week 1 Context for Learning:				
1.	2.	3.	4.	5.
Week 2 Context for Learning:				
1.	2.	3.	4.	5.
Week 3 Context for Learning:				
1.	2.	3.	4.	5.
Week 4 Context for Learning:				
1.	2.	3.	4.	5.
Week 5 Context for Learning:				
1.	2.	3.	4.	5.
Week 6 Context for Learning:				
1.	2.	3.	4.	5.

Year 4	Autumn 2	
Prior Learning	Key Vocabulary	
Objectives	When else will objective be covered	
<u>Number and Place Value</u> <ol style="list-style-type: none"> 1. Count backwards through zero to include negative numbers 2. Count in multiples of 6, 7, 9, 25 and 1000 3. Find 1000 more or less than a given number 4. Order and compare numbers beyond 1000 5. Identify, represent and estimate numbers using different representations 6. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens, and ones) 7. Round any number to the nearest 10, 100 or 1000 8. Solve number and practical problems that involve all of the above and with increasingly large positive numbers 	Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 9. Add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate. 10. Estimate and use inverse operations to check answers to a calculation 11. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why 	Core Objective Core Objective Core Objective	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 12. Recall multiplication facts for multiplication tables up to 12 x 12 13. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers 14. Recognise and use factor pairs and commutatively in mental calculations 	Core Objective Core Objective Core Objective	
<u>Fractions including decimals and percentages</u> <ol style="list-style-type: none"> 15. Count up and down in hundredths 	Core Objective	

<p>16. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</p> <p>17. Recognise and show using diagrams, families of common equivalent fractions</p> <p>18. Recognise and write common equivalent fractions</p> <p>19. Solve simple measure and money problems involving fractions and decimals to two decimal places</p>	<p>Core Objective</p> <p>Autumn 1, 2</p> <p>Autumn 1, 2</p> <p>Core Objective</p>
<p><u>Measurement</u></p> <p>20. Estimate, compare and calculate different measures, including money in pounds and pence</p> <p>21. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>22. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p> <p>23. Read, write and convert time between analogue and digital 12 and 24 hour clocks</p>	<p>Core Objective</p> <p>Autumn 1, 2</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Geometry</u></p> <p>24. Identify lines of symmetry in 2D shapes presented in different orientations</p> <p>25. Complete a simple symmetric figure with respect to a specific line of symmetry</p> <p>26. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p> <p>27. Identify acute and obtuse angles and compare and order angles up to two right angles by size</p>	<p>Autumn 1, 2</p> <p>Autumn 1, 2</p> <p>Autumn 1, 2</p> <p>Autumn 1, 2</p>
<p><u>Statistics/Data</u></p> <p>28. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</p> <p>29. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</p>	<p>Core Objective</p> <p>Core Objective</p>
<p><u>Algebra</u></p> <p>30. Perimeter can be expressed algebraically as $2(a+b)$ where a and b are the dimensions in the same unit</p>	<p>Core Objective</p>

Medium Term Plan				
Week 1 Context for Learning:				
1.	2.	3.	4.	5.
Week 2 Context for Learning:				
1.	2.	3.	4.	5.
Week 3 Context for Learning:				
1.	2.	3.	4.	5.
Week 4 Context for Learning:				
1.	2.	3.	4.	5.
Week 5 Context for Learning:				
1.	2.	3.	4.	5.
Week 6 Context for Learning:				
1.	2.	3.	4.	5.

Year 4	Spring 1	
Prior Learning	Key Vocabulary	
Objectives	When else will objective be covered	
<u>Number and Place Value</u> <ol style="list-style-type: none"> 1. Count backwards through zero to include negative numbers 2. Count in multiples of 6, 7, 9, 25 and 1000 3. Find 1000 more or less than a given number 4. Order and compare numbers beyond 1000 5. Identify, represent and estimate numbers using different representations 6. Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. 7. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens, and ones) 8. Round any number to the nearest 10, 100 or 1000 9. Solve number and practical problems that involve all of the above and with increasingly large positive numbers 	Core Objective Core Objective Core Objective Core Objective Core Objective Spring 1, Spring 2 Core Objective Core Objective Core Objective	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 10. Add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate. 11. Estimate and use inverse operations to check answers to a calculation 12. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why 	Core Objective Core Objective Core Objective	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 13. Recall multiplication facts for multiplication tables up to 12 x 12 14. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers 15. Recognise and use factor pairs and commutatively in mental calculations 	Core Objective Core Objective Core Objective	

<p><u>Fractions including decimals and percentages</u></p> <p>16. Count up and down in hundredths</p> <p>17. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</p> <p>18. Recognise and write common equivalent fractions</p> <p>19. Solve simple measure and money problems involving fractions and decimals to two decimal places</p>	<p>Core Objective</p> <p>Core Objective</p> <p>Spring 1, 2</p> <p>Core Objective</p>
<p><u>Measurement</u></p> <p>20. Estimate, compare and calculate different measures, including money in pounds and pence</p> <p>21. Find the area of rectilinear shapes by counting squares</p> <p>22. Read, write and convert time between analogue and digital 12 and 24 hour clocks</p> <p>23. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p> <p>24. Read, write and convert time between analogue and digital 12 and 24 hour clocks</p>	<p>Core Objective</p> <p>Spring 1, 2</p> <p>Spring 1, 2</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Geometry</u></p> <p>25. Describe positions on a 2D grid as coordinates in the first quadrant</p> <p>26. Plot specified points and draw sides to complete a given polygon</p>	<p>Spring 1, 2</p> <p>Spring 1, 2</p>
<p><u>Statistics/Data</u></p> <p>27. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</p> <p>28. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</p>	<p>Core Objective</p> <p>Core Objective</p>
<p><u>Algebra</u></p> <p>29. Perimeter can be expressed algebraically as $2(a+b)$ where a and b are the dimensions in the same unit</p>	<p>Core Objective</p>

Medium Term Plan				
Week 1 Context for Learning:				
1.	2.	3.	4.	5.
Week 2 Context for Learning:				
1.	2.	3.	4.	5.
Week 3 Context for Learning:				
1.	2.	3.	4.	5.
Week 4 Context for Learning:				
1.	2.	3.	4.	5.
Week 5 Context for Learning:				
1.	2.	3.	4.	5.
Week 6 Context for Learning:				
1.	2.	3.	4.	5.

Year 4	Spring 2	
Prior Learning	Key Vocabulary	
Objectives	When else will objective be covered	
<u>Number and Place Value</u> <ol style="list-style-type: none"> 1. Count backwards through zero to include negative numbers 2. Count in multiples of 6, 7, 9, 25 and 1000 3. Find 1000 more or less than a given number 4. Order and compare numbers beyond 1000 5. Identify, represent and estimate numbers using different representations 6. Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. 7. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens, and ones) 8. Round any number to the nearest 10, 100 or 1000 9. Solve number and practical problems that involve all of the above and with increasingly large positive numbers 	Core Objective Core Objective Core Objective Core Objective Core Objective Spring 1, Spring 2 Core Objective Core Objective Core Objective	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 10. Add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate. 11. Estimate and use inverse operations to check answers to a calculation 12. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why 	Core Objective Core Objective Core Objective	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 13. Recall multiplication facts for multiplication tables up to 12 x 12 14. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers 15. Recognise and use factor pairs and commutatively in mental calculations 	Core Objective Core Objective Core Objective	

<u>Fractions including decimals and percentages</u> 16. Count up and down in hundredths 17. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten 18. Recognise and write common equivalent fractions 19. Add and subtract fractions with the same denominator 20. Solve simple measure and money problems involving fractions and decimals to two decimal places	Core Objective Core Objective Spring 1, 2 Spring 2, Summer 1 Core Objective
<u>Measurement</u> 21. Estimate, compare and calculate different measures , including money in pounds and pence 22. Find the area of rectilinear shapes by counting squares 23. Read, write and convert time between analogue and digital 12 and 24 hour clocks 24. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days 25. Read, write and convert time between analogue and digital 12 and 24 hour clocks	Core Objective Spring 1, 2 Spring 1, 2 Core Objective Core Objective
<u>Geometry</u> 26. Describe positions on a 2D grid as coordinates in the first quadrant 27. Plot specified points and draw sides to complete a given polygon	Spring 1, 2 Spring 1, 2
<u>Statistics/Data</u> 28. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs 29. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Core Objective Core Objective
<u>Algebra</u> 30. Perimeter can be expressed algebraically as $2(a+b)$ where a and b are the dimensions in the same unit	Core Objective

Medium Term Plan				
Week 1 Context for Learning:				
1.	2.	3.	4.	5.
Week 2 Context for Learning:				
1.	2.	3.	4.	5.
Week 3 Context for Learning:				
1.	2.	3.	4.	5.
Week 4 Context for Learning:				
1.	2.	3.	4.	5.
Week 5 Context for Learning:				
1.	2.	3.	4.	5.
Week 6 Context for Learning:				
1.	2.	3.	4.	5.

Year 4	Summer 1	
Prior Learning	Key Vocabulary	
Objectives	When else will objective be covered	
<u>Number and Place Value</u> <ol style="list-style-type: none"> 1. Count backwards through zero to include negative numbers 2. Count in multiples of 6, 7, 9, 25 and 1000 3. Find 1000 more or less than a given number 4. Order and compare numbers beyond 1000 5. Identify, represent and estimate numbers using different representations 6. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens, and ones) 7. Round any number to the nearest 10, 100 or 1000 8. Solve number and practical problems that involve all of the above and with increasingly large positive numbers 	Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 9. Add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate. 10. Estimate and use inverse operations to check answers to a calculation 11. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why 	Core Objective Core Objective Core Objective	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 12. Recall multiplication facts for multiplication tables up to 12 x 12 13. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers 14. Recognise and use factor pairs and commutatively in mental calculations 15. Multiply and use two digit and three digit numbers by a one digit number using formal written layout 16. Solve problems involving multiplying and adding, including using the distributive law to 	Core Objective Core Objective Core Objective Summer 1, Summer 2 Summer 1, Summer 2	

<p>multiply two digit numbers by a one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</p>	
<p><u>Fractions including decimals and percentages</u></p> <p>17. Count up and down in hundredths</p> <p>18. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</p> <p>19. Round decimals with one decimal place to the nearest whole number</p> <p>20. Compare numbers with the same number of decimal places up to two decimal places</p> <p>21. Recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>22. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$</p> <p>23. Add and subtract fractions with the same denominator</p> <p>24. Find the effect of dividing a one or two digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</p> <p>25. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</p> <p>26. Solve simple measure and money problems involving fractions and decimals to two decimal places</p>	<p>Core Objective</p> <p>Core Objective</p> <p>Summer 1</p> <p>Summer 1</p> <p>Summer 2</p> <p>Summer 1, 2</p> <p>Spring 2, Summer 1</p> <p>Summer 2</p> <p>Summer 2</p> <p>Core Objective</p>
<p><u>Measurement</u></p> <p>27. Estimate, compare and calculate different measures, including money in pounds and pence</p> <p>28. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p> <p>29. Convert between different units of measure (e.g. kilometre to metre; hour to minute)</p> <p>30. Read, write and convert time between analogue and digital 12 and 24 hour clocks</p>	<p>Core Objective</p> <p>Core Objective</p> <p>Summer 1, 2</p> <p>Core Objective</p>
<p><u>Geometry</u></p> <p>31. Describe movements between positions as translations of a given unit to the left/right and up/down</p>	<p>Summer 1, 2</p>
<p><u>Statistics/Data</u></p>	

32. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Core Objective
33. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Core Objective
<u>Algebra</u> 34. Perimeter can be expressed algebraically as $2(a+b)$ where a and b are the dimensions in the same unit	Core Objective

Medium Term Plan				
Week 1 Context for Learning:				
1.	2.	3.	4.	5.
Week 2 Context for Learning:				
1.	2.	3.	4.	5.
Week 3 Context for Learning:				
1.	2.	3.	4.	5.
Week 4 Context for Learning:				
1.	2.	3.	4.	5.
Week 5 Context for Learning:				
1.	2.	3.	4.	5.
Week 6 Context for Learning:				
1.	2.	3.	4.	5.

Year 4	Summer 2	
Prior Learning	Key Vocabulary	
Objectives	When else will objective be covered	
<u>Number and Place Value</u> <ol style="list-style-type: none"> 1. Count backwards through zero to include negative numbers 2. Count in multiples of 6, 7, 9, 25 and 1000 3. Find 1000 more or less than a given number 4. Order and compare numbers beyond 1000 5. Identify, represent and estimate numbers using different representations 6. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens, and ones) 7. Round any number to the nearest 10, 100 or 1000 8. Solve number and practical problems that involve all of the above and with increasingly large positive numbers 	Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective Core Objective	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 9. Add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction where appropriate. 10. Estimate and use inverse operations to check answers to a calculation 11. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why 	Core Objective Core Objective Core Objective	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 12. Recall multiplication facts for multiplication tables up to 12 x 12 13. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers 14. Recognise and use factor pairs and commutatively in mental calculations 	Core Objective Core Objective Core Objective	

<p>15. Multiply and use two digit and three digit numbers by a one digit number using formal written layout</p> <p>16. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by a one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</p>	<p>Summer 1, Summer 2</p> <p>Summer 1, Summer 2</p>
<p><u>Fractions including decimals and percentages</u></p> <p>17. Count up and down in hundredths</p> <p>18. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</p> <p>19. Round decimals with one decimal place to the nearest whole number</p> <p>20. Compare numbers with the same number of decimal places up to two decimal places</p> <p>21. Recognise and write decimal equivalents of any number of tenths or hundredths</p> <p>22. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$</p> <p>23. Find the effect of dividing a one or two digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</p> <p>24. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</p> <p>25. Solve simple measure and money problems involving fractions and decimals to two decimal places</p>	<p>Core Objective</p> <p>Core Objective</p> <p>Summer 1</p> <p>Summer 1</p> <p>Summer 2</p> <p>Summer 1, 2</p> <p>Summer 2</p> <p>Summer 2</p> <p>Core Objective</p>
<p><u>Measurement</u></p> <p>26. Estimate, compare and calculate different measures, including money in pounds and pence</p> <p>27. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p> <p>28. Convert between different units of measure (e.g. kilometre to metre; hour to minute)</p> <p>29. Read, write and convert time between analogue and digital 12 and 24 hour clocks</p>	<p>Core Objective</p> <p>Core Objective</p> <p>Summer 1, 2</p> <p>Core Objective</p>
<p><u>Geometry</u></p> <p>30. Identify lines of symmetry in 2D shapes presented in different orientations</p> <p>31. Complete a simple symmetric figure with respect to a specific line of symmetry</p>	<p>Autumn 1, 2</p> <p>Autumn 1, 2</p>

32. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Autumn 1, 2
33. Identify acute and obtuse angles and compare and order angles up to two right angles by size	Autumn 1, 2
34. Describe movements between positions as translations of a given unit to the left/right and up/down	Summer 1, 2
<u>Statistics/Data</u>	
35. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Core Objective
36. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Core Objective
<u>Algebra</u>	
37. Perimeter can be expressed algebraically as $2(a+b)$ where a and b are the dimensions in the same unit	Core Objective

Medium Term Plan				
Week 1 Context for Learning:				
1.	2.	3.	4.	5.
Week 2 Context for Learning:				
1.	2.	3.	4.	5.
Week 3 Context for Learning:				
1.	2.	3.	4.	5.
Week 4 Context for Learning:				
1.	2.	3.	4.	5.
Week 5 Context for Learning:				
1.	2.	3.	4.	5.
Week 6 Context for Learning:				
1.	2.	3.	4.	5.

