

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 5	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. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero 2. Read, write, order and compare numbers to at least 1, 000, 000 and determine the value of each digit 3. Round any number up to 1, 000, 000 to the nearest 10, 100, 1000, 10 000, 100 000 4. Solve number problems and practical problems that involve all of the above 	Core Objective Core Objective Core Objective Core Objective	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 5. Add and subtract numbers mentally and with increasingly large numbers 6. Add and subtract whole numbers with more than 4 digits, including using formal written methods 7. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 8. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	Core Objective Core Objective Core Objective Core Objective	
<u>Multiplication and Division</u>		

<p>9. Multiply and divide numbers mentally drawing upon known facts</p> <p>10. Identify multiplies and factors, including all factor pairs of a number, and common factors of two numbers</p> <p>11. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>12. Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes</p> <p>13. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>14. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p>	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Fractions including decimals and percentages</u></p> <p>15. Read, write, order and compare numbers with up to three decimal places</p> <p>16. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>17. Recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred” and write percentages as a fraction with denominator 100 as a decimal fraction</p>	<p>Autumn 1, 2</p> <p>Autumn 1, 2</p> <p>Autumn 1, 2 & Spring 1, 2</p>
<p><u>Measurement</u></p> <p>18. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling</p> <p>19. Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>20. Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p> <p>21. Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>22. Solve problems including converting between units of time</p>	<p>Core Objective</p> <p>Autumn 2</p> <p>Autumn 1, Spring 1, Summer 1</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Geometry</u></p> <p>23. Identify 2D shapes, including cubes and other cuboids, from 2D representations</p>	<p>Autumn 1, 2</p>

24. Draw given angles, and measure them in degrees	Core Objective
<u>Statistics/Data</u> 25. Complete, read and interpret information in tables, including timetables	Core Objective
<u>Algebra</u>	

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 5	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. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero 2. Read, write, order and compare numbers to at least 1, 000, 000 and determine the value of each digit 3. Round any number up to 1, 000, 000 to the nearest 10, 100, 1000, 10 000, 100 000 4. Solve number problems and practical problems that involve all of the above 	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 5. Add and subtract numbers mentally and with increasingly large numbers 6. Add and subtract whole numbers with more than 4 digits, including using formal written methods 7. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 8. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 9. Multiply and divide numbers mentally drawing upon known facts 10. Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers 11. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. 12. Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes 13. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign 	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	

14. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	Core Objective
<u>Fractions including decimals and percentages</u> 15. Read, write, order and compare numbers with up to three decimal places 16. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths 17. Recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred” and write percentages as a fraction with denominator 100 as a decimal fraction	Autumn 1, 2 Autumn 1, 2 Autumn 1, 2 & Spring 1, 2
<u>Measurement</u> 18. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling 19. Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres 20. Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm ²) and square metres (m ²) and estimate the area of irregular shapes 21. Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) 22. Solve problems including converting between units of time	Core Objective Autumn 2 Autumn 1, Spring 1, Summer 1 Core Objective Core Objective
<u>Geometry</u> 23. Identify 2D shapes, including cubes and other cuboids, from 2D representations 24. Draw given angles, and measure them in degrees	Autumn 1, 2 Core Objective
<u>Statistics/Data</u> 25. Complete, read and interpret information in tables, including timetables	Core Objective
<u>Algebra</u>	

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 5	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. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero 2. Read, write, order and compare numbers to at least 1, 000, 000 and determine the value of each digit 3. Read Roman Numerals to 1000 (M) and recognise years written in Roman numerals 4. Round any number up to 1, 000, 000 to the nearest 10, 100, 1000, 10 000, 100 000 5. Solve number problems and practical problems that involve all of the above 	<p>Core Objective</p> <p>Core Objective</p> <p>Spring 1, Spring 2</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 6. Add and subtract numbers mentally and with increasingly large numbers 7. Add and subtract whole numbers with more than 4 digits, including using formal written methods 8. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 9. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 10. Multiply and divide numbers mentally drawing upon known facts 11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 12. Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for two digit numbers 13. Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers 14. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. 	<p>Core Objective</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Core Objective</p> <p>Core Objective</p>	

<p>15. Establish whether a number up to 100 is prime and recall prime numbers up to 19</p> <p>16. Recognise and use square numbers and cube numbers, and the notation for squared and cubed</p> <p>17. Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes</p> <p>18. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>19. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p>	<p>Spring 1 & Summer 1 Spring 1, 2</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Fractions including decimals and percentages</u></p> <p>20. Recognise and use thousandths and relates them to tenths, hundredths and decimal equivalents</p> <p>21. Round decimals with two decimal places to the nearest whole number and to one decimal place</p> <p>22. Read and write decimal numbers as fractions (e.g. 0.71 as 71/100)</p> <p>23. Recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred” and write percentages as a fraction with denominator 100 as a decimal fraction</p> <p>24. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $2/5 + 4/5 = 6/5 = 1, 1/5$)</p>	<p>Spring 1, 2</p> <p>Spring 1, 2</p> <p>Spring 1, 2 Autumn 1, 2 & Spring 1, 2</p> <p>Spring 1, 2</p>
<p><u>Measurement</u></p> <p>25. Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes (also included in measuring)</p> <p>26. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling</p> <p>27. Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>28. Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p> <p>29. Convert between different units of metric measure (e.g. kilometre and metre; centimetre</p>	<p>Spring 1, 2</p> <p>Core Objective</p> <p>Autumn 2</p> <p>Autumn 1, Spring 1, Summer 1</p> <p>Core Objective</p>

and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) 30. Solve problems including converting between units of time	Core Objective
<u>Geometry</u> 31. Identify 2D shapes, including cubes and other cuboids, from 2D representations 32. Draw given angles, and measure them in degrees 33. Know angles are measure in degrees: estimate and compare acute, obtuse and reflex angles 34. Identify: * angles at a point and one whole turn (360 degrees) *angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180 degrees) *other multiples of 90 degrees	Autumn 1, 2 Core Objective Spring 1, 2 Spring 1, 2
<u>Statistics/Data</u> 35. Complete, read and interpret information in tables, including timetables 36. Solve comparison, sum and difference problems using information presented in a line graph	Core Objective Spring 1, 2
<u>Algebra</u>	

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 5	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. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero 2. Read, write, order and compare numbers to at least 1, 000, 000 and determine the value of each digit 3. Read Roman Numerals to 1000 (M) and recognise years written in Roman numerals 4. Round any number up to 1, 000, 000 to the nearest 10, 100, 1000, 10 000, 100 000 5. Solve number problems and practical problems that involve all of the above 	<p>Core Objective</p> <p>Core Objective</p> <p>Spring 1, Spring 2</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 6. Add and subtract numbers mentally and with increasingly large numbers 7. Add and subtract whole numbers with more than 4 digits, including using formal written methods 8. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 9. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 10. Multiply and divide numbers mentally drawing upon known facts 11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 12. Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for two digit numbers 13. Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers 14. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. 	<p>Core Objective</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Core Objective</p> <p>Core Objective</p>	

<p>15. Recognise and use square numbers and cube numbers, and the notation for squared and cubed</p> <p>16. Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes</p> <p>17. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>18. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p>	<p>Spring 1, 2</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Fractions including decimals and percentages</u></p> <p>19. Recognise and use thousandths and relates them to tenths, hundredths and decimal equivalents</p> <p>20. Round decimals with two decimal places to the nearest whole number and to one decimal place</p> <p>21. Read, write, order and compare numbers with up to three decimal places</p> <p>22. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>23. Read and write decimal numbers as fractions (e.g. 0.71 as 71/100)</p> <p>24. Recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred” and write percentages as a fraction with denominator 100 as a decimal fraction</p> <p>25. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $2/5 + 4/5 = 6/5 = 1, 1/5$)</p>	<p>Spring 1, 2</p> <p>Spring 1, 2</p> <p>Autumn 1, 2</p> <p>Autumn 1, 2</p> <p>Spring 1, 2</p> <p>Autumn 1, 2 & Spring 1, 2</p> <p>Spring 1, 2</p>
<p><u>Measurement</u></p> <p>26. Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes (also included in measuring)</p> <p>27. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling</p> <p>28. Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>29. Solve problems including converting between units of time</p> <p>30.</p>	<p>Spring 1, 2</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>

<p><u>Geometry</u></p> <p>31. Identify 2D shapes, including cubes and other cuboids, from 2D representations</p> <p>32. Draw given angles, and measure them in degrees</p> <p>33. Use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>34. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p> <p>35. Know angles are measure in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>36. Identify:</p> <ul style="list-style-type: none"> * angles at a point and one whole turn (360 degrees) *angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180 degrees) *other multiples of 90 degrees <p>37. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed</p>	<p>Autumn 1, 2</p> <p>Core Objective</p> <p>Summer 1</p> <p>Summer 2</p> <p>Spring 1, 2</p> <p>Spring 1, 2</p> <p>Summer 1, 2</p>
<p><u>Statistics/Data</u></p> <p>38. Complete, read and interpret information in tables, including timetables</p> <p>39. Solve comparison, sum and difference problems using information presented in a line graph</p>	<p>Core Objective</p> <p>Spring 1, 2</p>
<p><u>Algebra</u></p> <p>See <i>Geometry</i></p> <p>40. Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p>	<p>Summer 1</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 5	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. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero 2. Count forwards or backwards in steps of powers of ten for any given number up to 1,000,000 3. Read, write, order and compare numbers to at least 1, 000, 000 and determine the value of each digit 4. Round any number up to 1, 000, 000 to the nearest 10, 100, 1000, 10 000, 100 000 5. Solve number problems and practical problems that involve all of the above 	<p>Core Objective</p> <p>Summer 1, 2</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 6. Add and subtract numbers mentally and with increasingly large numbers 7. Add and subtract whole numbers with more than 4 digits, including using formal written methods 8. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 9. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 10. Multiply and divide numbers mentally drawing upon known facts 11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 12. Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for two digit numbers 13. Divide numbers up to 4 digits by a one digit number using the formal written method of short division and interpret remainders appropriately for the context 14. Identify multiplies and factors, including all factor pairs of a number, and common factors 	<p>Core Objective</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Summer 1, 2</p> <p>Core Objective</p>	

<p>of two numbers</p> <p>15. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>16. Establish whether a number up to 100 is prime and recall prime numbers up to 19</p> <p>17. Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes</p> <p>18. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>19. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p>	<p>Core Objective</p> <p>Spring 1 & Summer 1</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Fractions including decimals and percentages</u></p> <p>20. Compare and order fractions whose denominators are all multiples of the same number</p> <p>21. Add and subtract fractions with the same denominator and multiples of the same number</p> <p>22. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</p> <p>23. Solve problems involving numbers up to three decimal places</p> <p>24. Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of 10 or 25</p>	<p>Summer 1, 2</p> <p>Summer 1, 2</p> <p>Summer 1, 2</p> <p>Summer 1, 2</p> <p>Summer 1, 2</p>
<p><u>Measurement</u></p> <p>25. Estimate volume (e.g. using 1cm³ blocks to build cubes and cuboids and capacity e.g. using water)</p> <p>26. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling</p> <p>27. Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p> <p>28. Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>29. Solve problems including converting between units of time</p>	<p>Summer 1, 2</p> <p>Core Objective</p> <p>Autumn 1, Spring 1, Summer 1</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Geometry</u></p> <p>30. Draw given angles, and measure them in degrees</p> <p>31. Use the properties of rectangles to deduce related facts and find missing lengths and</p>	<p>Core Objective</p> <p>Summer 1</p>

angles 32. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	Summer 1, 2
<u>Statistics/Data</u> 33. Complete, read and interpret information in tables, including timetables	Core Objective
<u>Algebra</u> <i>See Geometry</i> 34. Use the properties of rectangles to deduce related facts and find missing lengths and angles .	Summer 1

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 5	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. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero 2. Count forwards or backwards in steps of powers of ten for any given number up to 1,000,000 3. Read, write, order and compare numbers to at least 1, 000, 000 and determine the value of each digit 4. Round any number up to 1, 000, 000 to the nearest 10, 100, 1000, 10 000, 100 000 5. Solve number problems and practical problems that involve all of the above 	<p>Core Objective</p> <p>Summer 1, 2</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Addition and Subtraction</u> <ol style="list-style-type: none"> 6. Add and subtract numbers mentally and with increasingly large numbers 7. Add and subtract whole numbers with more than 4 digits, including using formal written methods 8. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 9. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>	
<u>Multiplication and Division</u> <ol style="list-style-type: none"> 10. Multiply and divide numbers mentally drawing upon known facts 11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 12. Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for two digit numbers 13. Divide numbers up to 4 digits by a one digit number using the formal written method of short division and interpret remainders appropriately for the context 14. Identify multiplies and factors, including all factor pairs of a number, and common factors 	<p>Core Objective</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Spring 1, 2 & Summer 1, 2</p> <p>Summer 1, 2</p> <p>Core Objective</p>	

<p>of two numbers</p> <p>15. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>16. Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes</p> <p>17. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>18. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p>	<p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p>
<p><u>Fractions including decimals and percentages</u></p> <p>19. Compare and order fractions whose denominators are all multiples of the same number</p> <p>20. Read, write, order and compare numbers with up to three decimal places</p> <p>21. Add and subtract fractions with the same denominator and multiples of the same number</p> <p>22. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</p> <p>23. Solve problems involving numbers up to three decimal places</p> <p>24. Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of 10 or 25</p>	<p>Summer 1, 2</p> <p>Summer 1, 2</p> <p>Summer 1, 2</p> <p>Summer 1, 2</p> <p>Summer 1, 2</p>
<p><u>Measurement</u></p> <p>25. Estimate volume (e.g. using 1cm³ blocks to build cubes and cuboids and capacity e.g. using water)</p> <p>26. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling</p> <p>27. Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>28. Solve problems including converting between units of time</p> <p>29. Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints</p>	<p>Summer 1, 2</p> <p>Core Objective</p> <p>Core Objective</p> <p>Core Objective</p> <p>Summer 2</p>
<p><u>Geometry</u></p> <p>30. Draw given angles, and measure them in degrees</p> <p>31. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p>	<p>Core Objective</p> <p>Summer 2</p>

32. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	Summer 1, 2
<u>Statistics/Data</u> 33. Complete, read and interpret information in tables, including timetables	Core Objective
<u>Algebra</u>	

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.