

Subject area	Aspect	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number	Number and place value – counting	<ul style="list-style-type: none"> • AOL: Maths Numbers have an order they follow. Each number is one more than the previous number. Count to 5 forwards and backwards, saying one number for each item in order. covered • AOL: Maths The last number reached when counting, tells you how many there are in total. Link numerals and amounts, showing the right number of fingers or objects to match numerals up to 5. covered • AOL: Maths Recite numbers in order to 10. covered 	<ul style="list-style-type: none"> • AOL: Maths Numbers follow a sequence. Each number is one more than the previous number. The last number reached when counting tells you how many there are in total. Count objects, actions and sounds, up to 10 forwards and backwards, beginning at 0, 1 or any given number and link numerals with its cardinal number value. covered • AOL: Maths Find one more or one less than numbers to 10. covered • AOL: Maths Explore odd and even numbers to 10. covered 	<ul style="list-style-type: none"> • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. covered • Identify one more or less than a given number, using numbers to 100. covered • Count in multiples of 1, 2, 5 and 10. covered 	<ul style="list-style-type: none"> • Count in steps of 2, 3 and 5 from 0, and count in tens from any number, forwards or backwards. covered 	<ul style="list-style-type: none"> • Count from 0 in multiples of 4, 8, 10, 50 and 100. covered • Find 10 or 100 more or less than a given three-digit number. covered 	<ul style="list-style-type: none"> • Count in multiples of 6, 7, 9, 25 and 1000. covered • Find 10, 100 or 1000 more or less than a given number up to 10,000. covered • A positive number is greater than zero. A negative number is less than zero. Count backwards through 0 to include negative numbers. covered 	<ul style="list-style-type: none"> • Count forwards or backwards in steps of powers of 10, for any given number up to at least 1,000,000. covered • Temperatures can be measured in °Celsius (°C). 0°C is the freezing point of water and 100°C is the boiling point of water. Count forwards and backwards with positive and negative whole numbers through zero, in context, and apply to solving simple problems, such as those involving temperature. covered 	
	Multiplication and division – estimating and checking				<ul style="list-style-type: none"> • Division is the opposite of multiplication. Multiplication is the opposite of division. Recognise and use the inverse relationship between multiplication and division in calculations, working within the 2, 5 and 10 times tables. covered 	<ul style="list-style-type: none"> • Inverse operations are opposites that reverse the effect of the other operation. Multiplication and division are inverse operations. Recognise and use the inverse relationship between multiplication and division in calculations to check answers and written methods, when multiplying and dividing by 2, 3, 4, 5, 8 and 10. covered 	<ul style="list-style-type: none"> • Inverse operations are opposites that reverse the effect of the other operation. Multiplication and division are inverse operations. Recognise and use the inverse relationship between multiplication and division in calculations up to 12 (12 x 12), to check answers and written methods. covered 		<ul style="list-style-type: none"> • Estimate means to quickly find, with some thought of the calculation, an approximate value close to the right value. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. covered
	Fractions – multiplying and dividing fractions and decimals						<ul style="list-style-type: none"> • A proper fraction has a numerator less than the denominator. An improper fraction has a numerator equal to or greater than the denominator. A mixed number is the combination a whole number and a proper fraction. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. covered 	<ul style="list-style-type: none"> • To multiply fractions, multiply the numerators together and then multiply the denominators together. Write the answer in its simplest form. Multiply simple pairs of proper fractions, writing the answer in its simplest form. covered • To divide fractions by whole numbers, multiply the denominator by the whole number. Divide proper fractions by whole numbers. covered • Multiply one-digit numbers with up to two decimal places by whole numbers. covered • Use written division methods where the answer has up to two decimal places. covered 	
	Multiplication and division – multiplying and dividing by 10, 100 and 1000					<ul style="list-style-type: none"> • A tenth is 1 divided by 10 (1/10). A hundredth is 1 divided by 100 (1/100). 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. covered 	<ul style="list-style-type: none"> • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. covered 	<ul style="list-style-type: none"> • In place value, each place is 10 times the value of the place to its right. Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000, giving answers up to 	

Number and place value – rounding			<ul style="list-style-type: none"> For two or more digit numbers, if the number to the right of the place value number you are rounding is equal to or greater than 5, round up. If the number to the right of the place value number you are rounding is less than 5, round down. Round any four-digit number to the nearest 10, 100 or 1000. covered For two or more digit numbers, if the number to the right of the place value number you are rounding is equal to or greater than 5, round up. If the number to the right of the place value number you are rounding is less than 5, round down. Round decimals with up to five digits and one decimal place to the nearest whole number (4532.6 → 4533). covered 	<ul style="list-style-type: none"> For two or more digit numbers, if the number to the right of the place value number you are rounding is equal to or greater than 5, round up. If the number to the right of the place value number you are rounding is less than 5, round down. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000. covered For two or more digit numbers, if the number to the right of the place value number you are rounding is equal to or greater than 5, round up. If the number to the right of the place value number you are rounding is less than 5, round down. Round decimals with two decimal places to the nearest whole number and to one decimal place (380.64 → 380.6; 34.65 → 34.7; 1456.54 → 1457). covered 	<p>three decimal places. covered</p> <ul style="list-style-type: none"> For two or more digit numbers, if the number to the right of the place value number you are rounding is equal to or greater than 5, round up. If the number to the right of the place value number you are rounding is less than 5, round down. Round any whole number to a required degree of accuracy. covered
Fractions – problem solving		<ul style="list-style-type: none"> Solve problems involving Y3 fractions skills, such as adding and subtracting fractions with the same denominator within one whole. covered 	<ul style="list-style-type: none"> Solve problems involving increasingly challenging fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. covered Solve simple measures and money problems involving fractions and decimals to two decimal places. covered 	<ul style="list-style-type: none"> Solve problems involving numbers up to three decimal places and Y5 fractions skills. covered $1/2 = 50\% = 0.5$ $1/4 = 25\% = 0.25$ $1/5 = 20\% = 0.2$ $2/5 = 40\% = 0.4$ $4/5 = 80\% = 0.8$ $1/10 = 10\% = 0.1$ $1/25 = 4/100 = 4\% = 0.04$ Solve problems that require knowing percentage and decimal equivalents of $1/2$, $1/4$, $1/5$, $2/5$, $4/5$ and fractions with a denominator of a multiple of 10 or 25. covered 	<ul style="list-style-type: none"> Solve problems involving rounding numbers to a specified degree of accuracy and Y6 fractions skills. covered Solve problems involving the calculation of percentages, percentages of measures and, with support, percentages for comparison. covered
Fractions – compare and order fractions and decimals		<ul style="list-style-type: none"> The numerator of a fraction is the top number and shows how many parts there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. Unit fractions have a numerator of 1. Non-unit fractions have a numerator greater than 1. Compare and order unit fractions or non-unit fractions with the same denominators. covered 	<ul style="list-style-type: none"> In place value, each place is 10 times the value of the place to its right, including after the decimal point. Compare and order numbers with the same number of decimal places up to two decimal places. covered 	<ul style="list-style-type: none"> The numerator of a fraction is the top number and shows how many parts there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. Unit fractions have a numerator of 1. Non-unit fractions have a numerator greater than 1. Compare and order unit and non-unit fractions whose denominators are all multiples of the same number. covered In place value, each place is 10 times the value of the place to its right, including after the decimal point. Read, write, order and compare numbers with up to three decimal places. covered 	<ul style="list-style-type: none"> Compare and order fractions > 1, mixed numbers, decimals and percentages. covered

Fractions – adding and subtracting fractions	<ul style="list-style-type: none"> The numerator of a fraction is the top number and shows how many parts there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. Add and subtract fractions with the same denominator within one whole ($5/7 + 1/7 = 6/7$). covered 	<ul style="list-style-type: none"> The numerator of a fraction is the top number and shows how many parts there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. A fraction where the numerator is greater than the denominator is an improper fraction and has a value greater than one. Add and subtract fractions with the same denominator beyond one whole ($5/8 + 7/8 = 1\ 1/2$). covered 	<ul style="list-style-type: none"> The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. covered 	<ul style="list-style-type: none"> Equivalent fractions have different numerators and denominators but are equal in value. Addition and subtraction can be carried out once the numerator and denominators have been multiplied or divided to get the same denominator. The answer is then found by adding or subtracting the numerator. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. covered
Fractions – counting	<ul style="list-style-type: none"> A tenth is 1 divided by 10 ($1/10$). Count up and down in tenths, recognising that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. covered 	<ul style="list-style-type: none"> A tenth is 1 divided by 10 ($1/10$). A hundredth is 1 divided by 100 ($1/100$). Count up and down in hundredths, recognising that hundredths arise when dividing an object or number by one hundred and dividing tenths by ten. covered 		
Multiplication and division – multiples, factors, prime numbers, square and cube numbers	<ul style="list-style-type: none"> From a set of numbers, identify multiples of 2, 3, 4, 5, 8 and 10. covered 	<ul style="list-style-type: none"> Multiples are the values in that number's times table. For example, the multiples of 6 are 6, 12, 18 and so on. Multiplying by 2 is the same as doubling. Multiplying by 4 is the same as doubling and doubling again. Multiplying by 10 and halving is the same as multiplying by 5. Identify multiples of numbers up to 12×12 and make connections between times tables, such as the 2, 4 and 8 times tables. covered Factors are whole numbers that divide exactly into another number. The original numbers are factors of the product number. Factor pairs are sets of two factors that when multiplied together give a particular number. Recognise and use factor pairs and commutativity in mental calculations for numbers up to 12×12. covered 	<ul style="list-style-type: none"> Factors are whole numbers that divide exactly into another number. The original numbers are factors of the product number. Factor pairs are sets of two factors that when multiplied together give a particular number. Common factors are factors found in more than one number. Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers. covered Factors are whole numbers that divide exactly into another number. The original numbers are factors of the product number. Prime numbers are whole numbers that are greater than 1 and can only divide by themselves and 1. Prime factors are prime numbers that can be multiplied together to give the original number. Composite numbers are non-prime numbers (whole numbers that can be made by multiplying more than one pair of factors). Recognise and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. covered Prime numbers are whole numbers that are greater than 1 and can only divide by themselves and 1. 2, 3, 5, 7, 11, 13, 17 and 19 are prime numbers. Establish whether a number up to 100 is prime and 	<ul style="list-style-type: none"> Multiples are the result after multiplying a number by an integer. They are in the given number's times table. Common multiples are multiples of two or more numbers. Factors are whole numbers that divide exactly into another number. Common factors are factors found in more than one number. Prime numbers are whole numbers that are greater than 1 and can only divide by themselves and 1. Identify common factors, common multiples and prime numbers. covered

					<p>recall prime numbers up to 19. covered</p> <ul style="list-style-type: none"> The notation for square numbers is (2) and cube numbers is (3). Recognise and use square numbers and cube numbers and the notation for them. covered 			
Fractions – finding fractions of amounts		<ul style="list-style-type: none"> Equivalence means of equal (the same) value. Two quarters ($\frac{2}{4}$) are equivalent to one half ($\frac{1}{2}$). Write simple fractions ($\frac{1}{2}$ of $6 = 3$) and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. covered 	<ul style="list-style-type: none"> Unit fractions have a numerator of 1. Non-unit fractions have a numerator greater than 1. Recognise, find and write fractions of a discrete set of objects, using unit and non-unit fractions with small denominators. covered 					
Multiplication and division – multiplying and dividing mentally		<ul style="list-style-type: none"> Mentally calculate mathematical statements for multiplication and division within the 2, 5 and 10 times tables. covered 	<ul style="list-style-type: none"> Mentally calculate mathematical statements for multiplication and division, including for two-digit numbers times one-digit numbers, within the 2, 3, 4, 5, 8 and 10 times tables. covered 	<ul style="list-style-type: none"> Use place value, known facts and derived facts to multiply and divide mentally with numbers up to 12 (12×12), including multiplying by 0 and 1, dividing by 1, and multiplying three numbers. covered 	<ul style="list-style-type: none"> Factors are whole numbers that divide exactly into another number. The original numbers are factors of the product number. Factor pairs are sets of two factors that when multiplied together give a particular number. A square number is a number multiplied by itself. A cube number is a number multiplied by itself three times. Multiply and divide numbers mentally, drawing upon known facts (multiples, factors, square and cube numbers). covered Perform mental calculations that include mixed operations and large numbers. covered 			
Number and place value – comparing, reading and writing numbers	<ul style="list-style-type: none"> AOL: Maths Numbers have an order they follow. Each number is one more than the previous number. Recite numbers, in order, past 5. covered 	<ul style="list-style-type: none"> AOL: Maths Numbers have an order and a pattern that they follow. Recite numbers, in order, to 20 and beyond. covered 	<ul style="list-style-type: none"> Read and write numbers to 100 in numerals. covered Read and write numbers from 1 to 20 in words. covered 	<ul style="list-style-type: none"> Read and write numbers to at least 100 in numerals and words. covered Compare and order numbers from 0 up to 100. covered Less than (<) shows that the value to the left of it is lower than the value to the right of it. Greater than (>) shows that the value to the left of it is higher than the value to the right of it. Equals (=) shows that the number on each side of it has or should have the same value. Use <, > and = signs to compare numbers up to 100. covered 	<ul style="list-style-type: none"> Read and write numbers up to 1000 in numerals and words. covered Compare and order numbers up to 1000. covered In Roman numerals I=1, II=2, III=3, IV=4, V=5, VI=6, VII=7, VIII=8 IX=9, X=10, XI=11 and XII=12. Read Roman numerals up to 12 (I to XII). covered 	<ul style="list-style-type: none"> Order and compare numbers beyond 1000, up to 10,000. covered In Roman numerals I=1, V=5, X=10, L=50 and C=100. All numbers between 1 and 100 can written using a combination of these. If a lower value numeral is placed after a higher value numeral, it indicates they should be added together. If a lower value is placed before a higher value numeral, it should be subtracted from the higher value. Read Roman numerals up to 100 (I to C) and know that, over time, the numeral system changed to include the concept of zero and place value. covered 	<ul style="list-style-type: none"> Read, write, order and compare numbers up to at least 1,000,000. covered Positive integers are whole numbers greater than zero. Negative integers are whole numbers less than zero. Interpret and order sets of numbers with positive and negative integers, in context. covered In Roman numerals, I=1, V=5, X=10, L=50, C=100, D=500 and M=1000. All numbers can written using a combination of these. If a lower value numeral is placed after a higher value numeral, it indicates they should be added together. If a lower value is placed before a higher value numeral, it should be subtracted from the higher value. Years are sometimes written in Roman numerals, for example 2020 is MMXX. Read Roman numerals up to 1000 (M) and recognise years written in Roman numerals. covered 	<ul style="list-style-type: none"> Read, write, order and compare numbers up to 10,000,000. Assign Positive integers are whole numbers greater than zero. Negative integers are whole numbers less than zero. Use negative numbers, in context, and calculate intervals across zero. covered
Multiplication and division –		<ul style="list-style-type: none"> Multiplication (\times) is repeated addition. Division (\div or $/$) is 	<ul style="list-style-type: none"> Recall and use multiplication and division facts for the 2, 3, 4, 	<ul style="list-style-type: none"> Recall and use multiplication and division facts for all times 				

multiplication tables	splitting or sharing into equal parts. An even number is any number ending in 0, 2, 4, 6 or 8. An odd number is any number ending in 1, 3, 5, 7 or 9. Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. covered	5, 8 and 10 times tables. covered	tables up to 12 (12 x 12). covered					
Addition and subtraction – estimating and checking	<ul style="list-style-type: none"> Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. Check their calculations by adding numbers in a different order. covered 	<ul style="list-style-type: none"> Estimate means to quickly find, with some thought of the calculation, an approximate value close to the right value. Inverse operations are opposites that reverse the effect of the other operation. Addition and subtraction are inverse operations. Estimate the answer to a calculation and use inverse operations to check answers. covered 	<ul style="list-style-type: none"> Estimate means to quickly find, with some thought of the calculation, an approximate value close to the right value. Inverse operations are opposites that reverse the effect of the other operation. Estimate (by rounding to the nearest 10, 100 and 1000) and use inverse operations to check answers, working with increasingly large numbers. covered 	<ul style="list-style-type: none"> Estimate means to quickly find, with some thought of the calculation, an approximate value close to the right value. Use rounding to estimate and check answers to calculations and determine, in the context of a problem, levels of accuracy. covered 	<ul style="list-style-type: none"> Estimate means to quickly find, with some thought of the calculation, an approximate value close to the right value. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. covered 			
Number and place value – problem solving	<ul style="list-style-type: none"> Use Y2 place value and number facts to solve problems. covered 	<ul style="list-style-type: none"> Use Y3 place value and number facts to solve problems. covered 	<ul style="list-style-type: none"> Use Y4 place value and number facts to solve problems, working with increasingly large positive numbers. covered 	<ul style="list-style-type: none"> Use Y5 place value and number facts to solve problems, working with positive and negative numbers. covered 	<ul style="list-style-type: none"> Use Y6 place value and number facts to solve number and practical problems, working with decimal numbers. covered 			
Fractions – recognise, represent and name fractions	<ul style="list-style-type: none"> AOL: Maths Sharing evenly means putting one object at a time into a group until the groups have the same amount of objects. Explore sharing resources in their play with adult support. covered 	<ul style="list-style-type: none"> AOL: Maths Sharing something evenly means that each group has the same amount. Only even numbers can be shared equally between two sets. Explore how to share amounts evenly using concrete resources. covered 	<ul style="list-style-type: none"> A half is one of two equal parts of a whole object, shape or quantity. Recognise, find and name a half as one of two equal parts of an object, shape or quantity. covered A quarter is one of four equal parts of a whole object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of a whole object, shape, or quantity. covered 	<ul style="list-style-type: none"> A half (1/2) is one of two equal parts of a whole object, shape or quantity. A quarter (1/4) is one of four equal parts of a whole object, shape or quantity. A third (1/3) is one of three equal parts of a whole object, shape or quantity. Recognise, find, name and write the fractions 1/4, 1/2, 2/4, 3/4 and 1/3 of a length, shape, or quantity. covered 	<ul style="list-style-type: none"> Equivalence means of equal (the same) value. The numerator of a fraction is the top number and shows how many parts there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. Recognise and show, using diagrams, equivalent fractions with small denominators. covered The numerator of a fraction is the top number and shows how many parts there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. Unit fractions have a numerator of 1. Non-unit fractions have a numerator greater than 1. Recognise and use fractions as numbers, including unit fractions and non-unit fractions with small denominators. covered 	<ul style="list-style-type: none"> A tenth is 1 divided by 10 (1/10). A hundredth is 1 divided by 100 (1/100). Recognise and show, using diagrams, families of common equivalent fractions. covered A decimal number is a number with a decimal point in it that shows the whole number to the left of the point and tenths, hundredths and thousandths and so on to the right of it. Fractions have decimal equivalents. $\frac{1}{4} = 0.25$, $\frac{1}{2} = 0.5$ and $\frac{3}{4} = 0.75$. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$. covered A tenth is 1 divided by 10 (1/10). A hundredth is 1 divided by 100 (1/100). Recognise and write decimal equivalents of any number of tenths or hundredths. covered 	<ul style="list-style-type: none"> Equivalence means of equal (the same) value. A tenth is 1 divided by 10 (1/10). A hundredth is 1 divided by 100 (1/100). Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. covered The numerator of a fraction is the top number and shows how many parts there are. The denominator of a fraction is the bottom number and shows into how many equal parts the item or number is divided. A proper fraction has a numerator less than the denominator. An improper fraction has a numerator equal to or greater than the denominator. A mixed number is the combination a whole number and a proper fraction. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number ($\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$). covered Read and write decimal numbers as fractions, such as $0.71 = \frac{71}{100}$. covered A tenth is 1 divided by 10 (1/10 or 0.1 in decimals). A 	<ul style="list-style-type: none"> A simple fraction has a whole number for a numerator and denominator. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. covered A fraction is a representation of the division of the numerator by the denominator. Fractions have decimal and percentage equivalents. They also form part of mixed numbers. Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction, such as $\frac{3}{8} = 0.375$ covered Fractions can be simplified by dividing the numerator and denominator by the same common factor. Use common factors to simplify fractions. covered Multiples are the result after multiplying a number by an integer. Common multiples are multiples of two or more numbers. Multiplying a numerator and denominator by a common multiple can give fractions in the same denomination (same denominator). Use common multiples to express fractions

hundredth is 1 divided by 100 (1/100 or 0.01 in decimals). A thousandth is 1 divided by 1000 (1/1000 or 0.001 in decimals). Recognise and use tenths, hundredths and decimal equivalents. **covered**

Multiplication and division – problem solving and applying

- **AOL: Maths** Sharing evenly means putting one object at a time into a group until the groups have the same amount of objects. Explore sharing resources in their play with adult support. **covered**
- **AOL: Maths** Doubling is adding the same number to itself. Sharing something evenly means that each group has the same amount. Only even numbers can be shared equally between two sets. Double quantities within 10 and explore how to share amounts evenly using concrete resources. **covered**
- With support, solve one-step problems involving multiplication and division, using concrete objects, pictorial representations and arrays. **covered**
- Solve problems involving multiplication and division, such as those linked to the 2, 5 and 10 times tables, using materials, arrays, repeated addition, mental methods and multiplication and division facts. **covered**
- Solve problems, including missing number problems, involving multiplying and dividing by 2, 3, 4, 5, 8 and 10. **covered**
- A positive number is greater than zero. A negative number is less than zero. An integer is a whole number that can be scaled up using repeated addition or multiplication. Solve problems, including measuring and positive integer scaling contexts, such as 8 times as high or 10 times as long. **covered**
- Correspondence in maths is how things are related. There are different types of relationship: one to one, one to many, many to one and many to many. Solve problems, including correspondence, in which n objects are connected to m objects. For example, 'If there are three hats and four coats, how many different outfits are possible?' **covered**
- The distributive law is that multiplying a number by a group of numbers added together is the same as doing each multiplication separately then adding them together. The associative law is that it doesn't matter how numbers are grouped (calculated) when adding or multiplying them. Solve two-step problems involving multiplying and adding, and use the distributive ($25 \times 4 = 20 \times 4 + 5 \times 4$) and associative ($2 \times 16 \times 5 = 2 \times 5 \times 16$) laws when multiplying two-digit numbers by one-digit numbers. **covered**
- An integer is a whole number that can be scaled up using repeated addition or multiplication. Correspondence in maths is how things are related. There are different types of relationship: one to one, one to many, many to one and many to many. Solve increasingly challenging integer scaling and correspondence problems, in which n objects are connected to m objects. **covered**
- Solve problems involving multiplication and division, including factors, multiples, squares and cubes. **covered**
- Equals (=) shows that things on both sides of it have or should have the same value. Solve multi-step problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. **covered**
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. **covered**
- Solve multiplication and division multi-step problems in contexts, deciding which operations and methods to use, explaining their choices. **covered**
- The acronym BODMAS can be used to remember the order in which operations should be calculated: brackets orders (powers) division and multiplication (rank equally) addition and subtraction (rank equally) Solve problems involving addition, subtraction, multiplication and division, applying their knowledge of the order of operations to multiply and divide when appropriate. **covered**

Multiplication and division – multiplying and dividing using written methods

- **AOL: Maths** Sharing evenly means putting one object at a time into a group until the groups have the same amount of objects. Explore sharing resources in their play with adult support. **covered**
- **AOL: Maths** Doubling is adding the same number to itself. Sharing something evenly means that each group has the same amount. Only even numbers can be shared equally between two sets. Double quantities within 10 and explore how to share amounts evenly using concrete resources. **covered**
- Doubling is adding the same number to itself. Halving is dividing or sharing a number into two equal parts or groups. Double and halve small quantities, using concrete objects and pictorial representations. **covered**
- Write and solve mathematical statements for multiplication and division using the multiplication (\times), division (\div) and equals (=) signs, such as within the 2, 5 and 10 times tables. **covered**
- Numbers can be multiplied in any order and the answer will be the same. For example, $5 \times 2 = 10$ and $2 \times 5 = 10$. Numbers cannot be divided in any order to give the same answer. Demonstrate that multiplication of two numbers in the 2, 5 and 10 times tables can be done in any order (commutative) but division of one number by another cannot. **covered**
- Write and calculate mathematical statements for multiplication and division using the times tables that they know (2, 3, 4, 5, 8 and 10). With increasing independence, use formal written methods for two-digit numbers times one-digit numbers. **covered**
- Multiply two-digit and three-digit numbers by any one-digit number, using a formal written method. **covered**
- Multiply numbers with up to four digits by a one-digit or two-digit number, using a formal written method, including long multiplication for two-digit numbers. **covered**
- A remainder is the whole number left over after a division calculation. Divide numbers with up to four digits by a one-digit number, using the formal written method of short division, and interpret remainders appropriately for the context. **covered**
- Multiply multi-digit numbers up to four digits by a two-digit whole number, using the formal written method of long multiplication. **covered**
- A remainder is the whole number left over after a division calculation. Remainders can be interpreted as fractions or rounded to whole numbers depending on the context. Divide numbers with up to four digits by a two-digit number, using the formal written method of short division where appropriate, interpreting remainders according to the context. **covered**
- A remainder is the whole number left over after a division calculation. Remainders can be interpreted as fractions or rounded to whole numbers

depending on the context. Divide numbers with up to four digits by a two-digit number, using the formal written method of long division, and interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context.

covered

- The acronym BODMAS can be used to remember the order in which operations should be calculated: brackets orders (powers) division and multiplication (rank equally) addition and subtraction (rank equally) Use their knowledge of the order of operations to carry out calculations involving the four operations, identifying how the position of brackets can affect the answer.

covered

Addition and subtraction – problem solving and applying

- **AOL: Maths** Adding objects makes the group bigger. Taking away objects makes the group smaller. Explore real-world addition and subtraction within their play, such as if they have two cars and a friend gives them one more, they will have three.

covered

- **AOL: Maths** Numbers to 10 can be made in different ways but the total is the same each time. Explore addition and subtraction with concrete objects, pictorial representations and number lines.

covered

- With support, solve simple, one-step problems that involve addition and subtraction, using concrete objects, pictorial representations and number lines, including missing number problems ($4 + \square = 9$; $7 = \square - 9$).

covered

- Apply their increasing knowledge of mental and written methods to solve simple problems with addition and subtraction, using concrete objects and pictorial representations, including those involving numbers, quantities and measures.

covered

- Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction.

covered

- Solve addition and subtraction two-step problems in different contexts, deciding which operations and methods to use and why.

covered

- Solve addition and subtraction multi-step problems in different contexts, including decimals and increasingly large numbers, deciding which operations and methods to use and why.

covered

- Solve addition and subtraction multi-step problems in different contexts, deciding which operations and methods to use and explaining their choices.

covered

- The acronym BODMAS can be used to remember the order in which operations should be calculated: brackets orders (powers) division and multiplication (rank equally) addition and subtraction (rank equally) Solve problems involving addition, subtraction, multiplication and division, applying their knowledge of the order of operations to add and subtract when appropriate.

covered

Addition and subtraction – adding and subtracting mentally

- **AOL: Maths** A number of objects can be separated in different ways but the total is still the same. Explore the different ways that groups of three and four objects can be separated.

covered

- **AOL: Maths** Numbers to 5 can be made in different ways but the total is the same each time.

Explore the composition of numbers to 5 and compare numbers.

covered

- **AOL: Maths** There are different ways of separating numbers into two groups but the total is still the same. Recall number bonds to 5 and explore the different ways that groups of 6–10 objects can be represented. Examples include, 3 and 4 together make 7, and 7 take away 4 leaves 3.

covered

- **AOL: Maths** Numbers to 10 can be made in different ways but the total is the same each time. Explore the composition of numbers to 10 and compare numbers.

covered

- A number bond is a pair of numbers that add up to a given number. Represent and use number bonds and related subtraction facts to 20 ($9 + 7 = 16$; $16 - 7 = 9$; $7 = 16 - 9$).

covered

- 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 are one-digit numbers. One-digit numbers are made up of one digit or number. Two-digit numbers have two digits, such as 12 or 20. Add and subtract one-digit and two-digit numbers to 20 ($9 + 9 = 18$; $18 - 9 = 9$), including 0, using abstract representations.

covered

- Recall and use addition and subtraction facts to 20, with fluency, and derive and use related addition and subtraction facts up to 100 ($3 + 7 = 10$; $10 - 7 = 3$; $30 + 70 = 100$; $100 - 70 = 30$).

covered

- Add and subtract numbers to 100 using concrete objects, pictorial representations and mentally, including a two-digit number and ones, a two-digit number and tens, adding three one-digit numbers, and two two-digit numbers.

covered

- Recall and use addition and subtraction facts up to 100 ($27 + 73 = 100$; $100 - 27 = 73$). Derive and use related facts up to 1000, working with more complex combinations ($27 + 73 = 100$; $270 + 730 = 1000$).

covered

- Add and subtract numbers mentally, including a three-digit number and ones, a three-digit number and tens, and a three-digit number and hundreds.

covered

- Partitioning breaks a number into its place value units. Use mental methods for addition and subtraction with four-digit numbers, including partitioning.

covered

- Add and subtract increasingly large numbers mentally, identifying and using the best mental strategies to tackle a range of problems.

covered

- Perform mental calculations that include mixed operations and large numbers.

covered

Addition and subtraction – adding and subtracting using written methods	<ul style="list-style-type: none"> • AOL: Maths Adding objects makes the group bigger. Taking away objects makes the group smaller. Experiment with mathematical mark making when solving real-world addition and subtraction problems. covered 	<ul style="list-style-type: none"> • AOL: Maths Adding means making a group larger and can be represented by the + symbol. Subtraction means making a group smaller and can be represented by the – symbol. Understand and use language and concepts relating to addition and subtraction. Be aware of the symbols related to addition and subtraction. covered 	<ul style="list-style-type: none"> • Addition (+) is putting two or more numbers or objects together to give a larger number (the total). Subtraction (–) is removing or taking away numbers or objects. What is left is the difference between the two numbers. The equals sign (=) shows that things on both sides of it have the same value. Read, write and interpret simple mathematical statements involving addition (+), subtraction (–) and equals (=) signs. covered 	<ul style="list-style-type: none"> • Numbers can be added in any order and the answer will be the same. For example, $7 + 8 = 15$ and $8 + 7 = 15$. Numbers cannot be subtracted in any order to give the same answer. Demonstrate that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. covered • Record addition and subtraction in columns to support their understanding of place value, in preparation for formal written calculations with larger numbers. covered 	<ul style="list-style-type: none"> • Add and subtract numbers with up to three digits, using the formal written methods of columnar addition and subtraction. covered 	<ul style="list-style-type: none"> • Where appropriate, add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction, including adding decimal numbers in the context of money. covered 	<ul style="list-style-type: none"> • Add and subtract whole numbers with more than four digits (including decimal numbers), using formal written methods of columnar addition and subtraction. covered 	<ul style="list-style-type: none"> • The acronym BODMAS can be used to remember the order in which operations should be calculated: brackets orders (powers) division and multiplication (rank equally) addition and subtraction (rank equally) Use their knowledge of the order of operations to carry out calculations involving the four operations, identifying how the position of brackets can affect the answer. covered
Number and place value – identifying and representing numbers	<ul style="list-style-type: none"> • AOL: Maths Three objects can be moved around but the total is always three. Identify and represent up to three objects, without counting, using concrete objects and pictorial representation. covered • AOL: Maths More means there is a larger amount. A lot is a large amount of objects. Use and understand language of quantities, such as more and a lot. covered 	<ul style="list-style-type: none"> • AOL: Maths However a group of objects is displayed, the total is still the same. Identify and represent up to five objects, without counting, using concrete objects and pictorial representation. covered • AOL: Maths The same as means that both quantities match. More than is a bigger amount. Less than is a smaller amount. Use and understand language related to adding and subtracting, including more than, less than and the same as. covered 	<ul style="list-style-type: none"> • Identify and represent numbers using concrete objects, pictorial representations and number lines. covered • Equal means the same in amount, size or number; more than means greater in amount or size; less than means smaller in amount or size; most means the biggest number or amount of something and least means the smallest number or amount of something. Use the language of equal to, more than, less than (fewer), most and least in various mathematical contexts, such as when measuring. covered 	<ul style="list-style-type: none"> • Estimate means to have a sensible guess. Estimating is calculating the approximate amount, size or value of something. Identify, represent and estimate numbers up to 100 using different representations, including a number line. covered • Place value refers to the amount a digit is worth due to its position in a number. For example, the digit 2 in 25 is worth 20 (two tens). Recognise the place value of each digit in a two-digit number (ones and tens). covered 	<ul style="list-style-type: none"> • Identify, represent and estimate numbers up to 1000 using different representations. covered • A digit is any number from 0 to 9. In place value, each place is 10 times the value of the place to its right. Recognise the place value of each digit in a three-digit number (hundreds, tens and ones). covered 	<ul style="list-style-type: none"> • Identify, represent and estimate numbers with up to four digits using different representations. covered • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). covered 	<ul style="list-style-type: none"> • In place value, each place is 10 times the value of the place to its right. Recognise the place value of each digit in numbers up to at least 1,000,000. covered 	<ul style="list-style-type: none"> • In place value, each place is 10 times the value of the place to its right. Recognise the place value of each digit in numbers up to 10,000,000 and identify the value of each digit in numbers with up to three decimal places. covered
Fractions – percentages	<ul style="list-style-type: none"> • % is the symbol for percent and percent is the number of parts per hundred. Recognise the percent symbol (%), knowing that percent relates to 'number of parts per hundred'. Write percentages as a fraction with the denominator 100 and as a decimal. covered • $100\% = 100/100 = 1.0$ $50\% = 50/100 = 1/2 = 0.5$ $25\% = 25/100 = 1/4 = 0.25$ $75\% = 75/100 = 3/4 = 0.75$ $10\% = 10/100 = 1/10 = 0.1$ $20\% = 20/100 = 1/5 = 0.2$ Recall the fraction and decimal equivalents of 50%, 25%, 75%, 10% and 20%. covered 							<ul style="list-style-type: none"> • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. covered
Ratio and proportion	Ratio and proportion	<ul style="list-style-type: none"> • Solve problems involving the relative sizes of two quantities, where missing values can be found by using integer multiplication and division facts. For example, 'In a class, 18 of the children are 						

					<p>girls. A quarter of the children in the class are boys. How many children are there altogether?' covered</p> <ul style="list-style-type: none"> Solve problems involving similar shapes, where the scale factor is known or can be found. For example, 'Use the given scale, 1 centimetre = 2.5 miles, to calculate each distance on the map.' covered Solve problems involving unequal sharing and grouping, using their knowledge of fractions and multiples. For example, 'Two diamond rings and four silver rings cost £1440. A diamond ring and a silver ring cost £660. How much does a silver ring cost?' covered
Statistics	Recording and organising	<ul style="list-style-type: none"> Data is facts and figures. A table in maths is a way to set out data so it is easy to record and see. Tally marks are a quick way of keeping track of numbers in groups of five. A pictogram uses pictures to represent data. Construct simple pictograms, tally charts, block diagrams and simple tables. covered 	<ul style="list-style-type: none"> Data is facts and figures. A table in maths is a way to set out data so it is easy to record and see. Tally marks are a quick way of keeping track of numbers in groups of five. A pictogram uses pictures to represent data. Present data using bar charts, pictograms and tables. covered 	<ul style="list-style-type: none"> Discrete data can only be shown in integers, for example, the number of children in a class. Continuous data can take any value, including decimals. Present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. covered 	<ul style="list-style-type: none"> Complete, read and interpret information in tables, including timetables. covered Construct pie charts and line graphs and use these to solve problems, making connections to angles, fractions and percentages. covered
	Interpreting	<ul style="list-style-type: none"> Data is facts and figures. A table in maths is a way to set out data so it is easy to record and see. Tally marks are a quick way of keeping track of numbers in groups of five. A pictogram uses pictures to represent data. Interpret simple pictograms, tally charts, block diagrams and tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. covered Data is facts and figures. A table in maths is a way to set out data so it is easy to record and see. Tally marks are a quick way of keeping track of numbers in groups of five. A pictogram uses pictures to represent data. Ask and answer questions about totalling and comparing categorical data for simple pictograms, tally charts, block diagrams and simple tables. covered 	<ul style="list-style-type: none"> Data is facts and figures. A table in maths is a way to set out data so it is easy to record and see. Tally marks are a quick way of keeping track of numbers in groups of five. A pictogram uses pictures to represent data. Interpret data from bar charts, pictograms and tables. covered 	<ul style="list-style-type: none"> Discrete data can only be shown in integers, for example, the number of children in a class. Continuous data can take any value, including decimals. Interpret discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. covered 	
	Using statistics and problem solving			<ul style="list-style-type: none"> Solve one-step and two-step problems using information presented in scaled bar charts, 	<ul style="list-style-type: none"> Solve comparison, sum and difference problems using information presented in bar Solve comparison, sum and difference problems using information presented in a line Solve comparison, sum and difference problems using information presented in line

				pictograms and tables, answering questions such as 'How many more?' and 'How many fewer?' covered	charts, pictograms, tables and other graphs. covered	graph. covered	graphs and pie charts. covered		
	Averages						<ul style="list-style-type: none"> Mean is a type of average, it is the total of the numbers divided by how many numbers there are. Calculate and interpret the mean as an average. covered 		
Geometry	Shapes and properties	<ul style="list-style-type: none"> AOL: Maths Shapes have different properties. They can be straight, long, curvy or short. Shapes are all around us in the environment. Explore shapes in the environment and use informal mathematical vocabulary to talk about the shape of everyday objects, such as round and tall. covered AOL: Maths 3-D shapes are solid shapes. They have different shaped faces. Select appropriate shapes for building and construction activities and combine shapes to make new ones. covered 	<ul style="list-style-type: none"> AOL: Maths 2-D shapes are flat. They have a different number of sides and angles. 2-D shapes can be folded and cut into different 2-D shapes. They can also be put together to make other 2-D shapes. Use mathematical names for common 2-D shapes and explore shapes in their play. covered AOL: Maths 3-D shapes are solid shapes. They have a different number of faces and edges. The faces are made up of different 2-D shapes. Use mathematical names for common 3-D shapes and use 3-D shapes in their play. covered 	<ul style="list-style-type: none"> These are common 2-D shapes: squares, rectangles, circles, triangles, pentagons, hexagons and octagons. Recognise and name common 2-D shapes, including rectangles, squares, circles and triangles, in different orientations and sizes, and relate them to everyday objects. covered Common 3-D shapes include cuboids, cubes, spheres, cones, cylinders and pyramids. Recognise and name common 3-D shapes, including cuboids, cubes, pyramids and spheres, in different orientations and sizes, and relate them to everyday objects. covered 	<ul style="list-style-type: none"> A two-dimensional (2-D) shape only has two measurements. These are common 2-D shapes: squares, rectangles, circles, triangles, pentagons, hexagons and octagons. A shape has symmetry in a vertical line if a line can be drawn down the middle of it and the left side is a mirror image of the right. Squares and rectangles have four sides and a vertical line of symmetry. Circles have one side and a vertical line of symmetry. Triangles have three sides and may have a vertical line of symmetry. Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. covered A three-dimensional (3-D) shape has three measurements and can be held. Common 3-D shapes include cuboids, cubes, spheres, cones, cylinders and pyramids. The flat surface of a 3-D shape is called a face. The faces of a cuboid can be rectangles and squares. Two of the faces on a cylinder are circles. One of the faces on a pyramid may be a circle, square or rectangle. Identify and describe 2-D shapes on the surface of 3-D shapes. covered A vertex of a 3-D shape is a corner where lines meet. The plural of vertex is vertices. An edge of a 3-D shape joins two vertices. The flat surface of a 3-D shape is called a face. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. covered Compare and sort common 2-D and 3-D shapes and everyday objects. covered 	<ul style="list-style-type: none"> A two-dimensional (2-D) shape only has two measurements. A three-dimensional (3-D) shape has three measurements and can be held. Draw 2-D shapes and make 3-D shapes using modelling materials. covered Common 3-D shapes include cuboids, cubes, spheres, cones, cylinders and pyramids. A vertex of a 3-D shape is a corner where lines meet. The plural of vertex is vertices. An edge of a 3-D shape joins two vertices. The flat surface of a 3-D shape is called a face. Recognise 3-D shapes in different orientations and describe them. covered 	<ul style="list-style-type: none"> A quadrilateral is a four-sided shape (quad is derived from Latin word meaning four and lateral is related to sides). A square has four equal sides, four right angles (90°) and four lines of symmetry. A rectangle or oblong has two sets of two equal sides, four right angles (90°) and two lines of symmetry. A parallelogram has two sets of two equal sides, two sets of two equal angles and usually no lines of symmetry. A rhombus has four equal sides, two sets of two equal angles and two lines of symmetry. A trapezium has at least two parallel sides and can have pairs of equal angles and a line of symmetry. A triangle is a three-sided shape (tri is derived from Latin and Greek meaning three). An equilateral triangle has three equal sides and angles and three lines of symmetry. An isosceles triangle has two equal sides and angles. A scalene triangle has no equal sides and no equal angles. A right-angled triangle has a 90° angle. The angles in any triangle add up to 180°. Compare and classify geometric shapes, including quadrilaterals (square, rectangle, parallelogram, rhombus, trapezium and kite) and triangles (isosceles, equilateral, scalene and right-angled), based on their properties and sizes. covered 	<ul style="list-style-type: none"> A polygon (a 2-D shape formed with straight lines) is regular when all sides and angles are equal. A polygon is irregular if it has different length sides and/or angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. covered Use the properties of rectangles to deduce related facts and find missing lengths and angles. covered Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. covered 	<ul style="list-style-type: none"> A quadrilateral is a four-sided shape (quad is derived from Latin word meaning four and lateral is related to sides). A square has four equal sides, four right angles (90°) and four lines of symmetry. A rectangle or oblong has two sets of two equal sides, four right angles (90°) and two lines of symmetry. A parallelogram has two sets of two equal sides, two sets of two equal angles and usually no lines of symmetry. A rhombus has four equal sides, two sets of two equal angles and two lines of symmetry. A trapezium has at least two parallel sides and can have pairs of equal angles and a line of symmetry. A triangle is a three-sided shape (tri is derived from Latin and Greek meaning three). An equilateral triangle has three equal sides and angles and three lines of symmetry. An isosceles triangle has two equal sides and angles. A scalene triangle has no equal sides and no equal angles. A right-angled triangle has a 90° angle. The angles in any triangle add up to 180°. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangle, quadrilateral or regular polygon. covered The conventional marking for parallel lines are > in the centre of each of the pair two parallel sides. >> is used for a second pair of parallel lines within a shape. Arcs are used to represent angles and a square is used to represent a right angle (90°). Draw 2-D shapes using given dimensions and angles, using conventional markings for parallel lines and right angles. covered Some 3-D shapes, like cubes and pyramids, can be

Position and direction

- **AOL: Maths** Positional language includes in, under, inside, behind, and on top. Use and understand positional language. **covered**
- **AOL: Maths** Extend and create ABAB patterns using a variety of objects and notice and correct an error in a repeating pattern. Identify patterns in the environment. **covered**

- **AOL: Maths** Positional language includes under, over, next to, behind, in front, above and through. Use and understand language that describes where objects are in relation to each other. **covered**
- **AOL: Maths** Continue, copy and create repeating patterns using a variety of objects. **covered**

- Position, direction and movement can be described using these words: top, middle, bottom, on top of, in front of, above, between, around, near, close, far, up, down, turn, forwards, backwards, inside, outside, left and right. Describe position, direction and movement, including whole, half, quarter and three-quarter turns. **covered**

- Position, directly and movement, including rotation, can be described using these words: top, middle, bottom, on top of, in front of, above, between, around, near, close, far, up, down, turn, forwards, backwards, inside, outside, left and right. A half (1/2) is one of two equal parts of a whole object, shape, quantity or movement. A quarter (1/4) is one of four equal parts of a whole object, shape, quantity or movement. Clockwise is the movement in the direction of the rotation of the hands of a clock. The opposite direction is anti-clockwise. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). **covered**
- Order and arrange combinations of mathematical objects in patterns and sequences. **covered**

- Coordinates are numbers or letters that determine the position of a point or shape in a grid, graph or map. The x-axis is horizontal from or through zero and the y-axis is vertical from or through zero. When reading coordinates or using them to determine a point, x is read before y (like in the alphabet). Describe positions on a 2-D grid as coordinates in the first quadrant. **covered**
- A polygon is any 2-D shape formed with straight lines. Coordinates are numbers or letters that determine the position of a point or shape in a grid, graph or map. The x-axis is horizontal from or through zero and the y-axis is vertical from or through zero. When reading coordinates or using them to determine a point, x is read before y (like in the alphabet). Plot specified points and draw sides to complete a given polygon. **covered**
- A translation moves a shape up, down or from side to side, without reflecting it or changing its shape. Describe movements between positions as translations of a given unit to the left or right and up or down. **covered**

- A translation moves a shape up, down or from side to side, without reflecting it or changing its shape. A reflection is the image of a shape if it was looked at in a mirror. Shapes that have been translated or reflected are the same size as the original shape. 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. **covered**

- Coordinates are numbers or letters that determine the position of a point or shape in a grid, graph or map. The x-axis is horizontal from or through zero and the y-axis is vertical from or through zero. When reading coordinates or using them to determine a point, x is read before y (like in the alphabet). A full coordinate grid has four quadrants (first, second, third and fourth). The first quadrant is the top right, second is top left, third is bottom left and fourth is bottom right. Describe positions on the full coordinate grid (all four quadrants). **covered**
- A translation moves a shape up, down or from side to side, without reflecting it or changing its shape. A reflection is the image of a shape if it was looked at in a mirror. Shapes that have been translated or reflected are the same size as the original shape. Reflected shapes are the same distance from the axis from which they are reflected. Draw and translate simple shapes on the coordinate plane and reflect them in the axes. **covered**

opened or unfolded along their edges to create a flat shape. The unfolded shape is called the net of the solid. Recognise, describe and build simple 3-D shapes, including making nets. **covered**

- A circle is a 2-D shape. A circle's perimeter (the total distance around the edge of a shape) is called circumference. Diameter of a circle is the straight line segment that passes through the centre. Radius is a straight line from the centre to the circumference of a circle and is half the diameter. Illustrate and name the parts of a circle, including the radius, diameter and circumference, and know that the radius is half the diameter. **covered**

Angles

- A vertex is where two lines meet. An angle is the amount of turn, or space, between two line around their vertex and is measured in degrees (°). Recognise angles as a property
- An acute angle is less than a right angle (90°). An obtuse angle is greater than a right angle (90°) but less than a straight angle (180°). Identify acute and obtuse angles and
- An angle is the amount of turn, or space, between two lines around their vertex and is measure in degrees (°). An acute angle is less than a right angle (90°). An obtuse angle is
- Angle is the amount of turn, or space, between two line around their vertex and is measure in degrees (°). An acute angle is less than a right angle (90°). An obtuse

			<p>of a shape or a description of a turn. covered</p> <ul style="list-style-type: none"> • A right angle is a quarter-turn. Two right angles make a half-turn. Three right angles make three quarters of a turn. Four right angles make a complete turn. Identify right angles and recognise that two right angles make a half-turn, three make three quarters of a turn and four make a complete turn. covered • Identify whether angles are greater or less than a right angle. covered • Horizontal lines go across. Vertical lines go up and down. Perpendicular lines are lines that form a right angle where they meet or cross. Parallel lines never meet or cross. They are always the same distance apart. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. covered 	<p>compare and order angles up to two right angles (180°) by size. covered</p>	<p>greater than a right angle (90°) but less than a straight angle (180°). A reflex angle is greater than a straight angle (180°) but less than 360° (a complete rotation). Estimate and compare acute, obtuse and reflex angles. covered</p> <ul style="list-style-type: none"> • An angle is the amount of turn, or space, between two lines around their vertex and is measure in degrees (°). Draw given angles and measure them in degrees (°). covered • An angle is the amount of turn, or space, between two lines around their vertex and is measure in degrees (°). Identify angles that meet at a point on a straight line and half a turn (total 180°), and angles that meet at a point and one whole turn (total 360°), and identify other multiples of 90°. covered 	<p>angle is greater than a right angle (90°) but less than a straight angle (180°). A reflex angle is greater than a straight angle (180°) but less than 360° (a complete rotation). Vertically opposite angles are the angles opposite each other when two lines cross and are always equal. The angles in a quadrilateral or polygon add up to 360°. The angles in any triangle add up to 180°. Recognise angles where they meet at a point, are on a straight line or are vertically opposite, and find missing angles. covered</p>			
Symmetry				<ul style="list-style-type: none"> • A shape or object is symmetrical if you can draw a straight line vertically, horizontally or diagonally down the middle of it and the two sides are a mirror image of the each other. The straight, often imaginary, lines are called lines or axes of symmetry. Identify lines of symmetry in 2-D shapes presented in different orientations. covered • A shape or object is symmetrical if you can draw a straight line vertically, horizontally or diagonally down the middle of it and the two sides are a mirror image of the each other. The straight, often imaginary, lines are called lines or axes of symmetry. Complete a simple symmetric figure with respect to a specific line of symmetry (horizontal, vertical or diagonal). covered 					
Measurement	Length, height, mass, weight, capacity and volume	<ul style="list-style-type: none"> • AOL: Maths Items can have different heights, lengths and weights. Containers hold different amounts. Explore length, height, weight and capacity in their play and begin to use language associated with this with support, such as long, short, tall, heavy, light, full 	<ul style="list-style-type: none"> • AOL: Maths Items can be measured to show how long, tall or heavy they are. Use language in their play, including heavy, light, heavier, lighter, long, short, longer, shorter, tall, taller, full and empty. covered • AOL: Maths Items can be measured using non 	<ul style="list-style-type: none"> • Length is a measure of how long something is from end to end. Height is a measure of how high something is from head to foot or top to base. Mass or weight is the measure of the amount of something and how heavy it is. Capacity is how much a container can hold. Volume is the space that water takes up in a container. Compare, describe and solve 	<ul style="list-style-type: none"> • Length is a measure of how long something is from end to end. Height is a measure of how high something is from head to foot or top to base. Mass or weight is the measure of the amount of something and how heavy it is. Capacity is how much a container can hold. Volume is the measure of the space something takes up. Equals (=) shows that things on 	<ul style="list-style-type: none"> • Length, width, and height can be measured in metre (m) and centimetres (cm). There are 100cm in 1m. Mass can be measured in kilograms or grams. There are 1000g in 1kg. Temperatures can be measure in °Celsius (°C). 0°C is the freezing point of water and 100°C is the boiling point of water. Capacity can be measured in litres (l) and 	<ul style="list-style-type: none"> • There are 100cm in 1m. There are 1000m in 1km. There are 1000g in 1kg. There are 1000ml in 1l. Kilo is derived from a Greek word meaning thousand. Convert between different units of measure by multiplying or dividing, such as kilometres to metres, kilograms to grams, litres to millilitres, metres to centimetres and vice 	<ul style="list-style-type: none"> • There are 10mm in 1cm, 100cm in 1m and 1000m in 1km. There are 1000g in 1kg. There are 1000ml in 1l. Kilo is derived from a Greek word meaning thousand. Convert between different units of metric measure, such as kilometres to metres, metres to millimetres, kilograms to grams, litres to millilitres and 	<ul style="list-style-type: none"> • There are 10mm in 1cm, 100cm in 1m and 1000m in 1km. There are 1000g in 1kg. There are 1000ml in 1l. Kilo is derived from a Greek word meaning thousand. Use, read, write and convert between standard units, converting measurements of length, mass and volume from a smaller unit of measure to a larger unit, and vice versa,

and empty.
covered

- **AOL: Maths** Compare the length and height of everyday objects in their play and begin to use language associated with this with support, such as long, short and tall.
covered

- **AOL: Maths** Compare the weight of everyday objects in their play and begin to use language associated with this, with support, such as heavy and light.
covered

- **AOL: Maths** Compare the capacity of everyday objects in their play and begin to use language associated with this, with support, such as full and empty.
covered

standard units to show how long or tall they are.

Compare and order the length and height of two to three objects and use and understand the language tall, taller, tallest, long, longer, longest, short, shorter and shortest.
covered

- **AOL: Maths** Items can be weighed using non standard units. Weights (masses) can be compared by using balance scales. Compare and order the weight of two to three items and use and understand the language heavy, heavier, heaviest, light, lighter and lightest.
covered

- **AOL: Maths** The capacity of an object is how much it can hold. Compare and order the capacity of two to three items in sand and water play and use and understand the language full and empty.
covered

practical problems for lengths and heights (long or short; longer or shorter; tall or short and double or half), mass or weight (heavy or light and heavier than or lighter than) and capacity and volume (full or empty; more than or less than and half, half full, quarter or quarter full).
covered

- Length is a measure of how long something is from end to end. Height is a measure of how high something is from head to foot or top to base. Measure and begin to record lengths and heights, using pictorial representations, numbers or words.
covered

- Mass or weight is the measure of the amount of something and how heavy it is. Measure and begin to record masses or weights, using pictorial representations, numbers or words.
covered

- Capacity is how much a container can hold. Volume is the space that water takes up in a container. Measure and begin to record capacities and volumes, using pictorial representations, numbers or words.
covered

both sides of it have or should have the same value. Less than (<) shows that the value to the left of it is lower than the value to the right of it. Greater than (>) shows that the value to the left of it is higher than the value to the right of it. Equals (=) shows that the number on each side of it has or should have the same value. Compare and order lengths, masses, volumes or capacities and record the results using >, < and =.
covered

- Estimate means to have a sensible guess. Estimating is calculating the approximate amount, size or value of something. A scale is a set of numbers on measuring equipment that is used to show the value or size of something. Length, width and height can be measured in metres (m) or centimetres (cm). There are 100cm in 1m. Mass can be measured in kilograms (kg) or grams (g). There are 1000g in 1kg. Temperatures can be measured in degrees Celsius (°C). 0°C is the freezing point of water and 100°C is the boiling point of water. Capacity can be measured in litres (l) or millilitres (ml). There are 1000ml in 1l. Choose and use appropriate standard units to estimate and measure lengths or heights in any direction (m or cm), masses (kg or g), temperatures (°C) and capacities (litres or ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.
covered

millilitres (ml). There are 1000ml in 1l. Measure, compare, add and subtract lengths (m, cm and mm), masses (kg and g) and volumes or capacities (l and ml), including mixed units (1m 50cm, 1kg 500g, 2l 300 ml).
covered

- Estimate, compare and calculate different measures.
covered

vice versa.
covered

- Imperial units of measurement were used in Britain from the 1820s to the 1960s when the metric system, using multiples of 10, was adopted. 1 inch = 2.5cm 1 foot = 12 inches = 30cm (approximately) 1 yard = 3 feet = 914cm (approximately 1m) 1 mile = 1760 yards = 1.6km 1 ounce = 28g 1 pound = 16 ounces = 453g (approximately 1/2kg) 1 stone = 14 pounds = 6.4kg 1 pint = 568ml (approximately 1/2l) 1 gallon = 8 pints = 4.5l Recognise and use approximate equivalences between metric units and common imperial units, such as inches, pounds and pints.
covered

- Capacity is a measure of how much something can hold. Volume is the measure of the space that an object or liquid takes up. Use cubes to estimate the volume of cubes and cuboids, and use water in different containers to estimate capacity.
covered

using decimal notation up to three decimal places.
covered

- 1 mile = 1760 yards = 1.6km. Convert between miles and kilometres.
covered
- Volume of cubes and cuboids are calculated by multiplying the length, width and height. Standard units of volume are cubic centimetres or centimetres cubed (cm³) and cubic metres or metres cubed (m³). Calculate, estimate and compare the volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units (mm³ and km³).
covered

Time

- **AOL: Maths** Events happen in an order and sometimes they have to wait for things to happen. Words, including later, show they need to wait for an event to happen. Begin to describe a sequence of real or fictional events using words, such as first and then.
covered

- **AOL: Maths** There is a structure and routine to the day. Events happen in order. Be aware of when certain events take place.
covered

- **AOL: Maths** Be aware that timers and clocks are

- **AOL: Maths** Events can be sequenced using everyday words, such as first, then, next, morning and afternoon. Order and sequence familiar events, such as everyday routines.
covered

- **AOL: Maths** There are seven days in the week. School days are Monday to Friday. Saturday and Sunday are the weekend. Know the order of the days of the week.
covered

- **AOL: Maths** Clocks tell us the time. Use simple timers to measure periods of time.
covered

- Events can be sequenced using these words: before, after, now, next, first, today, yesterday, tomorrow, morning, afternoon, evening, earlier and later. The past refers to events that have already happened, the present refers to events that are happening now and the future refers to events that haven't happened yet. Sequence events in chronological order using sequencing language (before, after, next, first, today, yesterday, tomorrow, morning, afternoon and evening).
covered

- Time can be described using these words: quicker, slower, earlier and later. Compare, describe and solve practical

- An analogue clock face can be divided into 60 minutes. It often shows 5 minute intervals using the numbers from 1 to 12 on the face. Compare and sequence intervals of time, including times to five minutes.
covered

- There are 60 seconds in a minute, 60 minutes in an hour and 24 hours in a day. Recall the number of seconds in a minute, minutes in an hour and hours in a day.
covered

- An analogue clock face can be divided into 60 minutes. It often shows 5 minute intervals using the numbers from 1 to 12 on the face. The hour hand is the shorter hand on a clock and

- Duration is the length of time something lasts. Compare durations of events, such as the time taken by particular events or tasks.
covered

- There are 60 seconds in a minute, 60 minutes in an hour and 24 hours in a day. There are 365 days in a year and 364 in a leap year, which occurs every fourth year. The months of the year are January (31 days), February (28 or 29 days), March (31 days), April (30 days), May (31 days), June (30 days), July (31 days), August (31 days), September (30 days), October (31 days), November (30 days) and December (31 days). Recall the number of seconds in a minute,

- Convert between units of time, such as hours to minutes.
covered

- There are 60 minutes in an hour and 60 seconds in a minute. There are 7 days in a week, between 28 and 31 days in a month, 365 days in a year and 364 in a leap year, which occurs every fourth year. Solve problems involving converting hours to minutes, minutes to seconds, years to months and weeks to days.
covered

- Read, write and convert time between analogue and digital 12 and 24-hour clocks.
covered

- There are 60 minutes in an hour and 60 seconds in a minute. There are 7 days in a week, between 28 and 31 days in a month, 365 days in a year and 364 in a leap year, which occurs every fourth year. Solve problems involving converting between units of time, including interpreting simple timetables.
covered

- There are 60 minutes in an hour and 60 seconds in a minute. There are 7 days in a week, between 28 and 31 days in a month, 365 days in a year and 364 in a leap year, which occurs every fourth year. Use, read, write and convert between standard units, converting measurements of length, mass and volume from a smaller unit of measure to a larger unit, and vice versa, using decimal notation up to three decimal places.
covered

used to measure time.
covered

problems involving time, using time-related vocabulary (quicker, slower, earlier and later).
covered

- There are seven days in a week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday. There are twelve months in a year: January, February, March, April, May, June, July, August, September, October, November and December. There are four seasons in a year: spring, summer, autumn and winter. Recognise and use language relating to dates, including days of the week, weeks, months and years.
covered

- The hour hand is the shorter hand on a clock and the minute hand is the longer hand. On an analogue clock, the minute hand points to 12 when it is an o'clock time and points to 6 when it is half past the hour. Tell the time to the hour and half past the hour, and draw the hands on a clock face to show these times.
covered

- Time can be measured using hours, minutes and seconds. Measure and begin to record time (hours, minutes and seconds), using pictorial representations, numbers or words.
covered

the minute hand is the longer hand. Clockwise is the movement round a clock from left to right and hands move in a clockwise direction. On an analogue clock, the minute hand points to 12 when it is an o'clock time and points to 6 when it is half past the hour. The minute hand points towards the 3 at quarter past and 9 at quarter to the hour. Tell and write the time to five minutes, including quarter past and to the hour, and draw the hands on a clock face to show these times.
covered

minutes in an hour, hours in a day and days in a year, leap year and each month.
covered

- In Roman numerals, I=1, II=2, III=3, IV=4, V=5, VI=6, VII=7, VIII=8 IX=9, X=10, XI=11 and XII=12. Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.
covered

- O'clock is used after a number from 1 to 12 to give the time when it is exactly that hour. A time is in the morning if it is followed by 'am' and in the afternoon if it is followed by 'pm'. Noon is 12pm and midnight is 12am. With increasing accuracy, estimate and read time to the nearest minute, and record and compare time in terms of seconds, minutes and hours. Use vocabulary relating to analogue, 12-hour and 24-hour clocks (o'clock, am and pm, morning, afternoon, noon and midnight).
covered

Money

- **AOL: Maths** Money is used to buy objects. Explore coins and money in their play.
covered

- **AOL: Maths** There are different types of coins. Each coin is worth a different amount. Use money, including coins, in role play situations to buy items.
covered

- Recognise and know the value of different denominations of coins and notes, including 1p, 2p, 5p, 10p, 20p, 50p, £1, £2 and notes.
covered

- Money can be measured in pounds (£) and pence (p). There are 100p in £1. Recognise and use the symbols for pounds (£) and pence (p) and combine amounts to make a particular value.
covered

- Find different combinations of coins that equal the same amounts of money.
covered

- Change is the money returned to someone when they have payed for an item with an amount that is greater than the price. Solve simple problems in a practical context, involving addition and subtraction of money of the same unit and giving change.
covered

- Money can be measured in pound (£) and pence (p). There are 100p in £1. Add and subtract amounts of money to give change, using both £ and p in practical contexts, including using formal written methods.
covered

- Estimate, compare and calculate different measures, including money in pounds and pence.
covered

Perimeter and area

- The perimeter is the total distance around the edge of a shape. Measure the perimeter

- Perimeter is the total distance around the edge of a shape. Measure and calculate the perimeter of a rectilinear

- Perimeter is the total distance around the edge of a shape. A composite shape is made of two or more rectilinear

- Recognise that shapes with the same areas can have different perimeters, and vice

			simple tables and pictograms. covered x 2
Nature	Food preparation and cooking		<ul style="list-style-type: none"> • AOL: Maths A recipe is set of instructions for preparing a dish and includes a list of the ingredients required. Follow instructions, including simple recipes, that include measures and ingredients. covered x 5
Place and space	Position	<ul style="list-style-type: none"> • AOL: Maths Positional language is used to describe where things are in relation to one another. Positional language includes in, on, next to, behind and in front of. Discuss routes and locations and use and understand some positional language. covered x 2 optional 	<ul style="list-style-type: none"> • AOL: Maths Positional language is used to describe where things are in relation to one another. Positional language includes in, on, next to, behind, in front of, in between, above, below and underneath. Use simple positional language to describe where things are in relation to each other and give directions. covered x 3 optional x 4