KS3 Maths & Finance Teaching and Learning Framework

Intent

Our students will enjoy developing their numeracy skills and take satisfaction in problem solving. We place emphasis on the mathematical process rather than the final answer, placing value on learning from mistakes and building on prior learning. Pupils will leave us understanding that maths is in the world around us and does not solely take place in the classroom.

Our maths curriculum will ensure that pupils are able to apply their mathematical skills to the world around them , ensuring they are as fully prepared for adulthood as possible.

Rationale

Mathematics plays a crucial role in our everyday lives, providing us with the tools to understand and engage with the world around us. It nurtures the natural ability of students to think logically, solve puzzles, and apply these skills to real-life problems. Our goal is to foster creative thinking and establish connections between mathematical concepts by exploring patterns in numbers, shapes, measurements, and statistics. Through the principles of fluency, reasoning, and problem-solving, we aim for our students to not only explain their reasoning but also justify their answers. This development will equip them with the necessary skills, knowledge, and efficient calculation methods to succeed economically and solve daily challenges. Mastering mathematics will be instrumental in preparing our students to confidently and resiliently navigate their transition to college or the workforce.

To ensure comprehensive learning, we have designed a spiral curriculum that allows our students to revisit topics and areas multiple times throughout their academic journey. Running through the framework there will be a focus on students ability to solve problems mentally whenever possible. With each revisit, the complexity of the subject matter increases, while maintaining connections with prior learning and placing it in context. This approach offers numerous benefits as it reinforces and strengthens

information and learning each time a topic is revisited. It enables a logical progression from basic concepts to more advanced ones. Additionally, students are encouraged to apply their foundational knowledge to achieve later learning objectives.

Cycle One					
Autumn 1			**Autumn 2**		
Place Value & Four Operations			**Number 1**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
Understanding Addition - Recognize and count objects and actions to understand addition as combining groups. **Understanding Subtraction** - Identify situations where subtraction is needed, such as taking away objects. **Introduction to Multiplication** - Explore multiplication	**Understanding Place Value (1-100):** - Students will learn to identify the value of digits in numbers up to 100 and understand the significance of digit positions within a number. **Ordering Numbers (Up to 1000):** - Students will	**Understanding Place Value (1-1000)** - Identify the value of digits in numbers up to 1000. - Recognize the importance of the position of digits in a number. - Add and subtract numbers using the vertical column method.. **Ordering Numbers**	**Identifying Simple Number Patterns:** - Recognize basic number patterns in number - Extend and predict simple patterns in numerical sequences, like adding the same number repeatedly. **Writing Whole Numbers as Words:** - Develop the ability to express whole numbers in word form.	**Introduction to Number Patterns:** - Students will be introduced to recognizing and describing number patterns in sequences, with a focus on arithmetic and geometric patterns. **Writing Numbers in Words:** - Learners will develop the foundational skill of	**Identifying Number Patterns:** - Recognize and describe number patterns in sequences, including arithmetic and geometric patterns. - Extend and predict patterns in numerical sequences. **Writing Numbers as Words:** - Develop the skill to express numbers in word form, including whole numbers and decimals. - Practise converting numerical expressions to written words accurately. **Understanding Odd and Even**

as repeated addition, **Introduction to Division** - Understand division as sharing or grouping objects into equal parts. - Divide a small set of objects into equal groups to introduce basic division concepts. **Recognizing Symbols** - Learn and recognize the addition (+), subtraction (-), multiplication (x), and division (÷) symbols. - Associate these symbols with their respective operations. **Using Basic Maths Facts** - Recall basic addition and subtraction facts for numbers 0-5. - Begin to use these facts to solve simple maths problems	begin to arrange numbers in ascending and descending order up to 1000 and gain proficiency in comparing and placing numbers correctly on a number line. **Introduction to Multiplication:** - Learners will recall multiplication facts for times tables up to 5 x table and solve multiplication problems involving a two-digit number multiplied by a single-digit number. **Introduction to Long Multiplication:** - Students will be introduced to long	**(Up to 1000)** - Arrange numbers in ascending and descending order up to 1000. - Compare and place numbers correctly on a number line. **Multiplication Timetables** - recall multiplication facts for times tables up to 10 x table - Solve multiplication problems involving a 3 digit and a 2 digit number. **Long Multiplication** - Perform long multiplication using the grid method with 3 digit by 2 digit. **Division Using Written Methods** - Learn various	**Halving and Doubling (Numbers up to 20):** - Practice halving and doubling small numbers efficiently. - Apply halving and doubling techniques for mental calculations with numbers up to 20. **Making Sensible Guesses with Rounding:** - Learners will hopefully be able to grasp the idea of rounding numbers as a way to make sensible guesses. -They should understand that rounding makes numbers easier to work with and helps in making quick and reasonable estimations in simple everyday situations, like guessing the number	expressing numbers in word form, including whole numbers and simple decimals. **Exploring Odd and Even Numbers:** - Students will differentiate between odd and even numbers and identify basic properties and characteristics of these types of numbers. **Introduction to Negative Numbers:** - Learners will explore the concept of negative numbers and their placement on the number line, without delving into complex operations. **Basic Rules for Arithmetic Operations:**	**Numbers:** - Differentiate between odd and even numbers. - Identify the properties and characteristics of both odd and even numbers. - Identify basic properties of odd and even numbers, like "odd numbers end in 1, 3, 5, 7, or 9." **Introducing Negative Numbers:** - Explore the concept of negative numbers and their placement on the number line. - Understand operations involving negative numbers (e.g., addition, subtraction). **Rules for Addition, Subtraction, Multiplication, and Division:** - Learn and apply rules for performing addition, subtraction, multiplication, and division operations. - Understand the order of operations and apply them appropriately. **Halving and Doubling:** - Practice halving and

	multiplication using the grid method with a two-digit number by a one-digit number. **Division:** - Learners will explore basic methods for performing division, such as repeated subtraction. **Making Amounts with Money:** - Students will practise constructing specific monetary amounts using a combination of coins and notes, considering different denominations, and making purchases with the appropriate	methods for performing division (eg repeated subtraction) - Introduce the "bus stop" method for long division. **Recognizing Coins and Notes:** - Identify and distinguish various coins and notes, including their denominations and unique features. - Recognize the monetary value associated with each coin and note. - Apply this knowledge during a visit to a local supermarket, identifying the currency used in transactions. **Making Amounts with Coins and**	of candies in a jar or the cost of a small toy. -Students should feel confident using rounding to make sensible and approximate guesses.	- Students will learn and apply basic rules for addition, subtraction, multiplication, and division, with an introduction to the order of operations. **Halving and Doubling Numbers:** - Learners will practise halving and doubling numbers for simple mental calculations. **Introduction to Rounding Numbers:** - Students will understand the fundamental concept of rounding numbers, particularly to the nearest ten for smaller numbers. They will practise using rounding for simple estimations in everyday situations.	doubling larger numbers efficiently. - Apply halving and doubling techniques for mental calculations. **Understanding BIDMAS (Order of Operations):** - Familiarise with the BIDMAS acronym (Brackets, Indices, Division and Multiplication, Addition and Subtraction). - Apply the order of operations to solve complex mathematical expressions. **Introduction to Factors:** - Recognize factors as numbers that can divide evenly into another number. - Identify factors of simple numbers up to 25 without complex calculations. **Introduction to Multiples:** - Understand multiples as numbers that can be obtained by counting forward from another number. - Find the first few multiples of numbers up to 10 through counting.

	currency. **Money and Decimals:** - Learners will begin to understand the connection between money and decimals, recognizing that cents represent parts of a whole dollar and starting to use decimal notation in dealing with monetary amounts. **Calculating Totals with Money:** - Students will learn to calculate the total cost of items, apply addition skills to find the sum of multiple items, and create and manage a shopping list	**Notes:** - Construct specific monetary amounts using a combination of coins and notes, considering different denominations. - Demonstrate the ability to form amounts accurately and efficiently. - Practise making purchases and paying for items at the local supermarket using the appropriate currency. **Introduction to Money as an Introduction to Decimals:** - Understand the connection between money and decimals by recognizing that cents represent parts of a whole dollar. - Begin to use decimal notation			**Identifying Prime Numbers (Up to 20):** - Define prime numbers as numbers that have exactly two factors: 1 and themselves. - Recognize prime numbers within a specified range from 1 to 20.

	during a simulated shopping scenario. **Calculating Change:** - Learners will develop skills in determining change after making a purchase, counting and providing change using coins and notes, and practising these skills during shopping scenarios. **Budgeting and Decision-Making:** - Students will receive an introduction to making informed decisions while shopping, setting a basic budget, and making choices within budget constraints.	when dealing with monetary amounts, such as understanding that £1.50 can be represented as 1.50 pounds. **Calculating Totals with Money (Including Real-Life Scenarios):** - Calculate the total cost of items when given a list of prices and quantities, simulating real-life shopping scenarios. - Apply addition skills to find the sum of multiple items, considering both the value of coins and notes. - Use these skills to create and manage a shopping list during the supermarket visit. **Calculating Change:**			

	Practical Application of Money Skills: - Students will apply money skills acquired during simulated shopping experiences to real-life situations, such as grocery shopping and everyday transactions, gaining practical experience in managing money and making purchases.	- Determine the change to be received after making a purchase by subtracting the total cost from the amount paid. - Accurately count and provide change using a combination of coins and notes. - Practice giving and receiving change during the supermarket visit when making purchases. **Budgeting and Decision-Making:** - Learn to make informed decisions when shopping by comparing prices, evaluating quality, and considering personal preferences. - Set a budget for a shopping trip and make choices that fit within the budget			

		constraints. - Reflect on budgeting and decision-making experiences during and after the supermarket visit. **Practical Application of Money Skills:** - Apply money skills acquired during the supermarket visit to real-life situations, such as shopping for groceries, personal items, or making everyday transactions. - Gain hands-on experience managing money, making purchases, and handling change in a practical setting.			
Spring 1			**Spring 2**		

Geometry & Measure			Number 2		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
Using a Ruler to Measure Lines: -Introduce learners to the concept of measurement using a ruler. Help them understand how to place a ruler alongside an object or line and count the units to find its length. Focus on measuring lines of different sizes in a hands-on and practical manner. **Identifying Straight Lines:** -Teach learners to recognize and distinguish straight lines from other shapes and objects. Use everyday examples, such as the edges of a book or the sides of a door, to help them identify and understand the characteristics of straight	**Introducing 2D Shapes:** -Pupils will be able to tell common 2d shapes apart by looking at their special features, such as how many sides and corners they have. **Introducing Properties of 2D Shapes:** - Students will describe important things about 2D shapes, like how many sides, corners, and if they look the same on both sides (symmetry). - They should find shapes that have specific things, like	**Classifying 2D Shapes:** - Categorize 2D shapes into broader groups, such as quadrilaterals, triangles, and circles. - Identify the subcategories within these groups, like isosceles triangles or rhombuses. **Exploring Perimeter and Area:** - Calculate the perimeter of compound 2D shapes by adding the lengths of their sides. - calculate the area of compound shapes **Constructing and Drawing 2D Shapes:**	**Understanding What Fractions Represent:** - Recognize that fractions represent parts of a whole or a group. - Understand that fractions are used to show how something is divided into smaller, equal parts. **Identifying Basic Fractions:** - Recognize and name simple fractions, such as halves (1/2) and quarters (1/4). - Learn to identify these fractions in everyday objects, like dividing a pizza into halves or sharing cookies into quarters. **Comparing Fractions:**	**Introduction to Simplifying Fractions:** - Learners will be introduced to the concept of simplifying fractions by reducing them to their lowest terms. **Comparing and Ordering Fractions with Different Denominators:** - Students will learn how to compare and order fractions when the denominators are different, using visual aids and simple reasoning. **Comparing and Ordering Fractions with Common Denominators/Num**	**Simplifying Fractions:** - Simplify fractions with different numerators and denominators to their lowest terms. **Comparing and Ordering Fractions (Different Denominators):** - Compare and order fractions when the denominators are dissimilar, using visual models and reasoning. **Comparing and Ordering Fractions (Common Denominators/Numerators):** - Compare and order fractions by finding common denominators or common numerators, promoting understanding of equivalence.

lines. **Recognizing Basic Shapes:** -Introduce simple geometric shapes like circles, squares, triangles, and rectangles. Help learners identify these shapes in their surroundings and understand their basic properties, such as the number of sides and corners. **Calculating Area in Basic Shapes:** -Begin to introduce the concept of area by focusing on basic shapes like squares and rectangles. Show learners how to count the number of squares inside these shapes to find their area in a visual and concrete way. **Practical Application of Measurement:**	corners that are exactly 90 degrees or sides that are the same length. **Naming 2D Shapes:** - Learners should group 2D shapes into bigger groups, like squares and rectangles in one group, and triangles in another. - They should also know the smaller groups inside these bigger groups, like triangles that have two sides the same length. **Introducing Perimeter and Area:** - Students will find out how to measure the outside of 2D	- Use rulers, protractors, and other tools to accurately draw 2D shapes with specific dimensions. - Understand how to construct shapes based on given criteria, like drawing a parallelogram with specific angles. **Analysing Real-World Applications of 2D Shapes:** - Apply knowledge of 2D shapes to solve real-world problems, such as calculating the area of a room or determining the shape of a garden. - Recognize and describe the presence of 2D shapes in everyday objects and architecture.	- Understand the concept of "more" or "less" when comparing fractions. - Compare basic fractions (e.g., 1/2 and 1/4) to identify which represents a larger or smaller part. **Practical Use of Fractions:** - Apply the concept of fractions in everyday situations, such as sharing toys or snacks with friends. - Use simple fractions to describe how objects or groups are divided or shared in a practical context.	**erators:** - Learners will explore comparing and ordering fractions by identifying common denominators or numerators, focusing on the idea of equivalence. **Adding & Subtracting Fractions with Common Denominators:** - Students will begin to add and subtract fractions with common denominators, simplifying answers whenever possible. **Adding and Subtracting Fractions with Different Denominators:** - Learners will be introduced to	**Adding and Subtracting Fractions (Different Denominators):** - Perform addition and subtraction operations on fractions with distinct denominators, ensuring the result is less than one. **Multiplying Proper Fractions (Simplified Answers):** - Multiply proper fractions together, ensuring the answer is simplified to its lowest terms. - Attempt using mixed numbers when conversion to improper (top-heavy) fractions will be required first. **Dividing one Fraction by another:** - Perform division operations to divide proper fractions, expressing answers as fractions. **Solving Word Problems (Dividing Proper Fractions by Whole Numbers):** - Solve word problems that require dividing proper fractions by whole numbers and express

-Encourage practical application by having learners measure everyday objects, identify straight lines, and recognize basic shapes in their environment. Provide simple, hands-on activities that reinforce these concepts in a real-world context.	shapes, called the perimeter, by adding up all the sides. - They should also learn how to find how much space is inside shapes like rectangles and squares, either by counting small squares or using special maths rules. **Constructing and Drawing 2D Shapes:** - Students will use tools like rulers and protractors to make 2D shapes that have the right size. - They will also know how to make shapes when they get special instructions, like drawing a four-sided shape	**Identifying Types of Angles:** -Students should be able to distinguish and correctly identify different types of angles, including acute, obtuse, right, and straight angles, both in written descriptions and geometric figures. **Measuring Angles:** -Develop proficiency in using a protractor to accurately measure angles in degrees. **Constructing Angles:** -Learn to use a ruler and protractor to draw angles with specified measurements. Students should be able to construct angles of various		addition and subtraction of fractions with distinct denominators, ensuring the result remains less than one. **Multiplying Proper Fractions with Simplified Answers:** - Students will learn to multiply proper fractions together while simplifying the result to its lowest terms. **Introduction to Dividing Fractions:** - Learners will be introduced to the concept of dividing proper fractions, expressing answers as fractions. **Solving Basic Word Problems with Fractions:** - Students will solve	answers in context. **Calculating Decimal Fraction Equivalents:** - Convert fractions to their decimal equivalents with an understanding of place value and decimal notation. **Understanding Percentages:** -Students should have a solid grasp of the concept of percentages and be able to explain that percentages represent parts out of 100. They should understand that percentages are a way to express proportions and can be used to compare quantities. **Calculating Percentages of an Amount:** -Develop proficiency in calculating percentages of a given amount. Students should be able to use various methods, such as finding a percentage of a number through multiplication or by converting percentages into fractions and decimals. They should also be able to solve

	with certain angles. **Analysing Real-World Applications of 2D Shapes:** - Students will use what they know about 2D shapes to solve problems in the real world, like finding out how much carpet to buy for a room or how to design a garden. - They will also spot and talk about 2D shapes in things we see everyday, like buildings and objects. **Identifying Types of Angles:** - Learners should be able to tell the difference between angles	sizes and types, including acute, obtuse, and right angles, following given instructions or angles from a diagram. **Angles in Real Life:** -Apply knowledge of angle types, angle measurement, and angle construction to solve geometric problems and real-world scenarios. Students should be able to calculate missing angles in triangles, quadrilaterals, and other polygons, as well as use angles to solve problems involving direction and orientation.		simple word problems involving the division of proper fractions by whole numbers and express answers within a contextual framework. **Introduction to Decimal Fraction Equivalents:** - Learners will be introduced to the idea of converting fractions to their decimal equivalents, emphasising understanding place value and decimal notation. **Exploring the Concept of Percentages:** - Students should gain a foundational understanding of percentages, recognizing that they represent parts out	practical problems that involve finding a percentage of an amount. Introduce the idea of 10% as a building block. **Calculating One Amount as a Percentage of Another:** -Enable students to calculate one amount as a percentage of another, emphasising the concept of finding a percentage increase or decrease. They should be able to use this knowledge to solve problems related to discounts and other real-world applications involving percentages.

	less than and greater than 90 degrees. **Measuring Angles:** - Students will be introduced to a protractor to measure angles in degrees, which tells us how big they are. **Introduction to Drawing Angles:** - Students will learn how to use a ruler and protractor to make angles that are a certain size. They can make big angles, small angles, or right angles, following directions or copying from a picture. **Applying Angle Concepts:**			of 100 and can express proportions for comparing quantities. **Calculating Basic Percentages of an Amount:** - Learners will develop proficiency in calculating basic percentages of given amounts using methods like multiplication and converting percentages into fractions and decimals. **Calculating Percentage Increases and Decreases:** - Students will be introduced to calculating one amount as a percentage increase or decrease relative to another, with a	

	- Students will use what they know about angles to solve maths problems and problems in the real world. They will figure out missing angles in shapes, and use angles to help with things like giving directions.			focus on practical applications such as discount, sales and special offers.	
Summer 1			**Summer 2**		
Algebra			**Statistics & Probability**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**

Green Meadows Academy

Recognizing Numbers and Counting: - Develop the ability to recognize and identify numbers from 1 to 10. - Practise counting objects and understanding numerical order. **Matching Objects to Numbers** - Connect objects to their corresponding numbers, such as matching three apples with the number "3." - Begin to understand that numbers represent quantities. **Understanding Basic Operations** - Explore basic addition and subtraction as combining or taking away objects. - Use physical objects or pictures to grasp the concept of adding and	**Introducing Function Machines:** - Students will be introduced to function machines and how they work. - They will learn to find the output of a function machine when given the input. **Using Diagrams and Numbers with Function Machines:** - Learners will start representing function machines using diagrams and simple algebraic expressions. - They will use numbers and basic operations to describe and solve problems involving	**Finding Function Outputs and Inverse Operations:** - Find the output of a single function machine when given the input. - Apply inverse operations to determine the input from the output of a function machine. **Utilising Diagrams, Letters, and Number Operations with Function Machines:** - Represent function machines using diagrams and algebraic expressions. - Use letters (unknowns) in combination with number operations to describe and solve function machine problems.	**Collecting Data:** - Learn to gather information by counting or asking questions in a structured way. - Understand that data is a collection of facts or details about something. **Creating Simple Pictograms:** - Use basic symbols or pictures to represent collected data. - Create simple pictograms to display data related to familiar objects or preferences. **Interpreting Pictograms:** - Recognize and understand that each	**Introduction to Pictograms:** - Learners should gain the ability to read and comprehend pictograms, recognizing that each symbol conveys a specific quantity. - Students will be able to make simple comparisons between quantities depicted in pictograms. **Creating Basic Pictograms:** - Students will be able to construct basic pictograms to represent data, selecting appropriate symbols and scales. - Learners should practise labelling pictograms clearly to effectively convey information.	**Interpreting Pictograms:** - Read and interpret information presented in pictograms, understanding that each symbol represents a certain quantity. - Make comparisons between different quantities represented in pictograms. **Creating Pictograms:** - Create pictograms to represent data, choosing appropriate symbols and scales. - Label pictograms clearly and ensure they effectively convey information. **Analysing Tally Charts:** - Interpret data presented in tally charts, recognizing how tally marks represent individual units. - Use tally charts to count and compare the frequency of different items or categories. **Constructing Tally Charts:** -Construct tally charts to collect

subtracting. **Introducing Simple Patterns** - Recognize and create simple patterns, like alternating colours or shapes in a sequence. - Begin to understand the idea of repetition and predictability. **Exploring Shapes and Sizes** - Identify and differentiate between basic shapes, such as circles, squares, and triangles. - Compare and describe the size of objects using terms like "big," "small," "short," and "long." **Creating and Extending Patterns** - Build on the concept of patterns by creating and extending more complex patterns, such as ABAB or ABBABB.	function machines. **Recognizing Function Machines in Expressions:** - Students will learn to identify function machines when they are presented in algebraic expressions. - They will begin to understand the connection between expressions and function machines. **Substituting Values into Expressions:** - Students will learn how to substitute specific values into algebraic expressions.	**Identifying Function Machines from Expressions:** - Recognize function machines when presented in algebraic expressions. - Understand the relationship between expressions and function machines. **Substitution into Expressions:** - Learn how to substitute specific values into algebraic expressions. - Calculate the result of expressions when values are replaced with unknowns or numbers. **Determining Inputs and Outputs for Two Function Machines:**	symbol or picture in a pictogram represents a piece of information or data. - Read and interpret simple pictograms to answer questions about the collected data. **Comparing Data Sets with Pictograms:** - Use pictograms to compare data from different categories or groups. - Make basic comparisons, such as identifying which category has more or fewer items based on the pictogram.	**Exploring Tally Charts:** - Learners will explore tally charts and understand how tally marks represent individual units of data. - Students will be able to use tally charts for counting and making basic comparisons between different items or categories. **Making Tally Charts:** - Students will develop the skill to create tidy and well-organised tally charts for data collection and organisation. - Learners should ensure that their tally charts are neatly presented and easily understandable.	and organise data efficiently. - Ensure tally charts are neatly organised and labelled, making them easy to read and understand. **Understanding Bar Charts (Bar Graphs):** - Interpret information presented in bar charts, recognizing that the height or length of bars represents data values. - Compare data across different categories or time periods using bar charts. **Creating and Customizing Bar Charts:** - Create bar charts to display data, selecting appropriate scales and labels for both axes. - Customise bar charts by choosing different colours and styles to enhance visual clarity and impact. **Analysing Pie Charts (Circle Graphs):** - Interpret data presented in

- Recognize patterns in everyday objects and activities.	**Working with Two Function Machines:** - Learners will find both input and output values for two different function machines. - They will explore how multiple function machines can be used in a sequence and learn to represent and solve two-step function machine problems using diagrams and simple algebraic expressions.	- Find both input and output values for two different function machines. - Analyse how multiple function machines can be used in a sequence. **Using Diagrams, Letters, and Two Function Machines:** - Represent and solve problems involving two function machines using diagrams and algebraic expressions. - Apply letters (unknowns) and number operations to describe and solve two-step function machine problems.		**Understanding Bar Charts (Bar Graphs):** - Learners should begin understanding the concept of bar charts, where the height or length of bars signifies data values. - Students will be able to initiate comparisons of data across different categories or time periods using basic bar charts. **Creating Simple Bar Charts:** - Students will be able to generate their own simple bar charts to display data, making informed choices regarding scales and axis labels. **Exploring Pie**	pie charts, understanding that each sector represents a portion of the whole. - Analyse the distribution of data among categories or components within a pie chart. -Understand that each sector represents a portion of the whole and is proportional to the data it represents.

				Charts: - Learners will explore the world of pie charts, comprehending that each sector represents a portion of a whole. - Students will be able to analyse how data is distributed among categories or components within a pie chart.	

Cycle Two					
Autumn 1			**Autumn 2**		
Number 1			**Geometry & Measure**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
Understanding Addition: - Build on the concept of addition by applying it to more complex scenarios. - Develop the ability to recognize and apply addition as a fundamental operation for combining quantities in various contexts, including numbers and word problems. **Understanding Subtraction:** - Extend the understanding of subtraction to more diverse situations where it	**Place Value:** - Students will be able to understand the place value of 4 digit numbers.- They will understand the importance of each digit's place in larger numbers, including hundreds and thousands. **Adding and Subtracting in Columns:** - Learners will start adding and subtracting two-digit numbers (from 10 to 99) using column methods.	**Column Addition and Subtraction:** - Add and subtract four digit numbers using column addition and subtraction -Move onto problems that involve borrowing and carrying when appropriate. **Ordering Numbers (Up to 10,000):** - Extend the ability to arrange numbers in ascending and	.**Recognizing Clocks** - Identify and recognize the appearance of both analogue and digital clocks. - Distinguish between the hour and minute hands on an analogue clock. . **Understanding Day and Night** - Differentiate between daytime and nighttime. - Recognize that the sun is typically up during the day and down during	**Introducing Analogue Clocks:** - Students will be able to identify analogue clocks and their basic parts, such as the hour hand, minute hand, and clock face. - They will start learning to tell the time on analogue clocks, particularly to the nearest hour and half-hour. **Measuring Event Duration:** - Learners will measure how long events last, using	**Calculating Duration of Events** - Learn to measure the duration of simple events using minutes and hours. - Calculate the time elapsed between the start and end of events using analogue clocks. **Converting Analogue to Digital Time** -Pupils will practise using the 24 hour clock. **Interpreting Calendars** - Explore the use of calendars to track dates, months, and years. - Understand how to locate specific dates and events on a calendar. **Worded Time Problems**

is necessary to subtract or remove items from a given set. - Identify and solve subtraction problems involving larger numbers and real-world scenarios, such as calculating change or comparing quantities. **Exploring Multiplication Concepts:** - Deepen the understanding of multiplication by exploring it as a method for scaling up or repeated addition, e.g., 3 groups of 4 is equivalent to 4 + 4 + 4. - Apply multiplication to solve more complex problems involving larger numbers, arrays, and real-world situations. **Introduction to Division Concepts:**	- They will be introduced to the vertical column method for addition and subtraction, focusing on tens and ones without carrying or borrowing. **Exploring Number Order (Up to 1000):** - Students will begin to arrange numbers in order, both from smallest to largest and largest to smallest, for numbers up to 1,000. - They will practise comparing and correctly placing numbers on a number line, including numbers beyond 100. **Multiplication**	descending order to include larger numbers up to 10,000. - Demonstrate proficiency in comparing and accurately placing numbers on an expanded number line, including values beyond 100. **Multiplication Timetables:** - Recall and apply multiplication facts confidently for times tables up to the 12 x table. - Solve multiplication problems involving t demonstrating improved multiplication fluency. **Long Multiplication:** - Advance long multiplication skills to include two-digit	the night. **Sequencing Daily Activities** - Arrange daily activities in chronological order, emphasising morning, afternoon, and evening routines. - Begin to comprehend the concept of a daily schedule. **Basic Time-Related Vocabulary** - Learn and use simple time-related vocabulary, such as "morning," "afternoon," "night," "today," and "tomorrow." - Practice using these words in everyday conversations related to time.	minutes and hours. - **Units of Time:** - Pupils will recap the units of time and their relation to each other. **Analogue to Digital Time:** - Students will start translating the time they see on analogue clocks into digital format, like turning 2:30 on an analogue clock into 2:30 PM. - They will practise going back and forth between analogue and digital ways of showing time. **Calendars:** - Learners will learn how to use calendars to keep track of dates,	- Solve word problems that involve telling time and calculating time intervals. - Use reading and comprehension skills to extract relevant information from the problems. -Introduce the idea of time zones throughout the world. **Adding Time of Events and Calculating Duration** - Add the durations of multiple events using analogue clocks and units of time. - Calculate the total time elapsed when multiple events occur sequentially.

- Expand the comprehension of division by delving into the concepts of sharing and grouping objects into equal parts for more extensive sets. - Solve division problems involving larger dividends, divisors, and quotients, and explore remainders and fractions. **Recognizing Mathematical Symbols:** - Continue to learn and recognize mathematical symbols such as addition (+), subtraction (-), multiplication (×), and division (÷). - Gain a deeper understanding of how these symbols represent mathematical operations and apply them to more	**Facts:** - Students will start recalling and using multiplication facts for times tables up to the 10 x table. - They will solve multiplication problems involving two-digit numbers multiplied by single-digit numbers, improving their multiplication skills. **Introduction to Long Multiplication:** - Learners will be introduced to long multiplication, starting with two-digit by two-digit multiplication using the grid method. - They will learn	by two-digit multiplication using the grid method. - Apply the grid method for multiplication efficiently to solve more complex problems involving larger numbers. **Division Using Written Methods:** - Build on knowledge of division methods by learning and practising the short division method. - Develop proficiency in solving division problems involving larger dividends and divisors, including remainders, using written methods such as short division.		months, and years. - They will start understanding how to find specific dates and events on a calendar. **Solving Time Word Problems:** - Students will solve word problems that involve telling time and figuring out how long things take. - They will use their reading and understanding skills to find the information they need in the problems. **Adding Time of Events and Figuring Out Duration:** - Students will learn how to add up how long multiple events last using analogue	

intricate mathematical expressions. **Applying Basic Maths Facts:** - Build upon the recall of basic addition and subtraction facts for numbers 0-5 to include facts for numbers up to 10 or higher. - Apply these facts confidently and efficiently to solve a wide range of mathematical problems, laying the foundation for more advanced mathematical operations.	how to use the grid method efficiently to solve more complicated problems with larger numbers. **Exploring Division with Written Methods:** - Students will explore division methods and begin to learn and practise the short division method.			clocks and units of time.	
Spring 1			**Spring 2**		
Number 2			**Algebra**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
	Multiples and	**Identifying Multiples and**		**Introducing**	**Understanding Unknowns:**

Collecting Data from Simple Observations: - Develop the ability to collect basic data by counting and observing everyday objects or occurrences. - Take part in recording the data in a simple, organised manner, such as tally marks or simple drawings. **Creating Basic Pictograms**: - Learn to represent collected data using simple pictograms, where each picture or symbol represents one unit of data. - Explore using easily recognizable symbols, like smiley faces or stars, to create the pictograms. **Interpreting Pictograms for Number Patterns:**	**Factors:** - Pupils will find pairs of numbers that are factors of a given number and begin to understand what factors and multiples are. **Multiplication and Division:** - Learners will solve problems with multiplication and division. - They will use what they know about factors and multiples to solve different kinds of maths problems, including some with squares and cubes. **Practical Money Skills:** - Students will practise making specific amounts of money using a	**Factors:** - Identify multiples and factors of a given number. - Find all factor pairs of a number, demonstrating a clear understanding of factors and multiples. **Problem Solving with Multiplication and Division:** - Solve problems that involve multiplication and division. - Apply knowledge of factors and multiples, as well as squares and cubes, to solve various mathematical problems. **Vocabulary of Prime Numbers and Composite Numbers:** - Define and use	**Recognizing Symbols as unknowns:** - Practise identifying vari as placeholders for numbers in simple equations. **Solving Simple Equations with Concrete Examples:** - Explore basic equations with a single unknown, using everyday objects like apples or toys to represent numbers. - Begin to solve these equations by finding the value of the unknown through physical	**One-Step Equations:** - Learners will learn how to solve one-step equations with addition or subtraction. They should practise using opposite actions to find out what the unknown is, like in equations such as 3 + ⬜ = 7. **Solving Simple Equations:** - Learners will take their equation-solving skills a step further by using multiplication and division. They should solve equations like 2x = 10 or 15 ÷ y = 3 by doing opposite actions. **Using Expressions to Represent**	- Define and identify what an unknown is in mathematical expressions. - Recognize and use simple unknowns (e.g., x, y) to represent unknown quantities. **Solving One-Step Equations** - Learn to solve one-step equations involving addition or subtraction. - Practise using inverse operations to isolate the unknown in equations like 3 + x = 7. **Solving Simple Equations with Multiplication and Division** - Extend equation-solving skills to include multiplication and division. - Solve equations like 2x = 10 or 15 ÷ y = 3 by applying inverse operations. **Using Expressions to Represent Real-World Scenarios** - Translate real-world situations into simple algebraic expressions. - Understand how to represent situations like "5 more than a number" as algebraic expressions (x + 5).

- Understand that pictograms represent data visually and that patterns can emerge from the arrangement of symbols. - Begin to identify and discuss simple number patterns, such as which symbol appears most frequently or least frequently in the pictogram. **Extending Pictogram Understanding:** - Progress to more complex pictograms, involving larger sets of data and a variety of symbols.	combination of coins and notes. - They will learn to form amounts correctly and use them for everyday purchases, especially when shopping at a local store. **Connecting Money and Decimals:** - Learners will begin to see how money and decimals are related. They will understand that cents are parts of a whole dollar. - They will start using decimal numbers when dealing with money, such as understanding that £1.50 is the same as 1.50 pounds.	the vocabulary related to prime numbers, prime factors, and composite numbers. - Distinguish between prime and composite numbers, understanding their properties. **Reinforcing Vocabulary and Prime Number Recognition:** - Continue to use and understand the vocabulary of prime numbers, prime factors, and composite numbers. - Determine whether a number up to 100 is prime or composite and recall prime numbers up to 19. **Multiplying with Formal Written**	manipulation, such as counting objects. **Using Shapes and Pictures for Algebraic Ideas:** - Understand that algebraic concepts can be connected to shapes and pictures. - Practise using drawings or shapes to illustrate basic equations, making the idea of unknowns more tangible. **Discovering Balance in Equations:** - Explore the idea of balance by understanding that equations represent	**Real-World Scenarios:** - Learners should be able to turn real-world situations into simple maths sentences. They should understand how to write things like "5 more than a number" as maths sentences, like x + 5. **Evaluating Expressions:** - Learners will learn to put numbers into unknowns and figure out the maths sentences. They should calculate things like 2x - 3 when they know what "x" is. **Identifying Patterns and Relationships:** - Learners should spot patterns and	**Substituting intoExpressions** - Learn to substitute values for unknowns and evaluate algebraic expressions. - calculate the value of expressions like 2x - 3 when x is given. **Identifying Patterns and Relationships** - Recognize patterns and relationships between numbers and unknowns. - Explore how changing the value of a unknown affects the outcome in algebraic expressions and equations **Identify Number Patterns:** - Recognize and describe linear number patterns in sequences, highlighting the constant difference between consecutive terms. **Extend Sequences:** -Confidently use the terminology of position and term when describing linear sequences. -Extend existing number sequences both forwards and backwards by

	Learning to Calculate Totals with Money: - Students will learn how to add up the cost of items when they have a list with prices and quantities, just like when shopping in real life. - They will use addition skills to find the total cost and practice making a shopping list for a visit to the store. **Change:** - Students will figure out how much change they should get back after buying something by taking away the cost from the amount they paid. - They will also	**Methods:** - Multiply numbers with up to 4 digits by a one or two-digit number. - Utilise formal written methods, including long multiplication, particularly when multiplying by two-digit numbers. **Advanced Multiplication with Formal Methods:** - Further practice multiplying numbers up to 4 digits by one or two-digit numbers. - Extend proficiency in using formal written methods, particularly focusing on long multiplication for two-digit numbers. **Mental Multiplication and Division:**	a balance between two sides. - Engage with simple equations like "2 + 3 = 5" and "4 - 2 = 2" to grasp the concept of keeping both sides equal.	connections between numbers and unknowns. They should see how changing the value of an unknown affects the maths sentences and equations. **Identify Number Patterns:** - Learners will recognize and talk about number patterns where each number is a certain amount bigger or smaller than the one before it. **Describing Sequences:** - Learners should feel comfortable talking about where a number is in a sequence and what it's called. They should be able to	applying the identified pattern to predict and generate subsequent terms accurately. **Generalize and Express Pattern:** -Develop the ability to generalise linear number patterns and express rules in words based on multiplying followed by either addition or subtractions. (term to term rule) **Solve Problems Involving Sequences: -**Apply understanding of linear number sequences to solve real-world problems and mathematical puzzles, requiring the recognition and manipulation of such sequences to find missing terms or make predictions.

	practise counting out the right coins and notes to give as change when making purchases. **Exploring Budgeting and Decision-Making:** - Students will start learning how to make good choices when shopping by comparing prices and thinking about what they like. - They will begin to set a budget for shopping trips and make choices that stay within that budget. **Applying Money Skills in Real Life:** - Learners will use the money skills they learned when shopping for groceries, personal	- Develop mental maths skills to multiply and divide numbers. - Draw upon known facts and multiplication tables to perform mental calculations efficiently. **Recognizing Coins and Notes:** - Identify and distinguish various coins and notes, including their denominations and unique features. - Recognize the monetary value associated with each coin and note. - Apply this knowledge during a visit to a local supermarket, identifying the currency used in transactions.		add new numbers to a sequence by following the pattern they've found. **Using Mathematical language to describe sequences:** - Learners should be able to make general rules for number patterns and say them in words, like "multiply and then add" (term to term rule). **Looking at Real-Life Sequences:** - Learners will use what they know about number patterns to solve real-life problems and maths puzzles. They should be able to find missing	

	items, or during everyday transactions.	**Making Amounts with Coins and Notes:** - Construct specific monetary amounts using a combination of coins and notes, considering different denominations. - Demonstrate the ability to form amounts accurately and efficiently. - Practise making purchases and paying for items at the local supermarket using the appropriate currency. **Money as a re-cap on Decimals:** - Understand the connection between money and decimals by recognizing that cents represent parts of a whole dollar. - Begin to use decimal notation		numbers or make predictions using these patterns. .	

		when dealing with monetary amounts, such as understanding that £1.50 can be represented as 1.50 pounds. **Calculating Totals with Money (Including Real-Life Scenarios):** - Calculate the total cost of items when given a list of prices and quantities, simulating real-life shopping scenarios. - Apply addition skills to find the sum of multiple items, considering both the value of coins and notes. - Use these skills to create and manage a shopping list during the supermarket visit. **Calculating Change:**			

		- Determine the change to be received after making a purchase by subtracting the total cost from the amount paid. - Accurately count and provide change using a combination of coins and notes. - Practice giving and receiving change during the supermarket visit when making purchases. **Budgeting and Decision-Making:** - Learn to make informed decisions when shopping by comparing prices, evaluating quality, and considering personal preferences. - Set a budget for a shopping trip and make choices that fit within the budget			

		constraints. - Reflect on budgeting and decision-making experiences during and after the supermarket visit. **Practical Application of Money Skills:** - Apply money skills acquired during the supermarket visit to real-life situations, such as shopping for groceries, personal items, or making everyday transactions. - Gain hands-on experience managing money, making purchases, and handling change in a practical setting.			
Summer 1			**Summer 2**		
Number 3			**Ratio & Proportion**		

Encountering	Developing	Enhancing	Encountering	Developing	Enhancing
Basic Rules for Arithmetic Operations: - Learn and apply basic rules for addition, subtraction, multiplication, and division with small numbers. - Practise these operations with simple calculations involving numbers to 10 **Making Sensible Guesses with Rounding:** - Learners will hopefully be able to grasp the idea of rounding numbers as a way to make sensible guesses. -They should understand that rounding makes numbers easier to work with and helps in making quick and reasonable estimations in simple everyday situations, like guessing the number of candies in a jar or the cost of a small toy.	**Introducing BIDMAS (Order of Operations):** - Students will be introduced to the BIDMAS acronym, which stands for Brackets, Indices, Division and Multiplication, Addition and Subtraction. - They will learn how to use the order of operations to begging to solve problems. **Rounding Numbers for Simple Estimations:** - Pupils will practise rounding to the nearest ten for smaller numbers and use rounded numbers to make quick and	**Understanding BIDMAS (Order of Operations):** - Familiarise with the BIDMAS acronym (Brackets, Indices, Division and Multiplication, Addition and Subtraction). - Apply the order of operations to solve complex mathematical expressions. **Rounding Numbers for Simple Estimations**: Students will gain confidence in using rounding as a helpful tool for making quick and approximate calculations. **Calculating Decimal Fraction**	**Sharing Equally:** -Support learners to be able to understand and demonstrate the concept of sharing objects or items equally among a group. Aim to divide a collection of objects into equal parts and ensure that each part has the same number of items. **Recognizing Proportion:** -Help students recognize the idea of proportion by using concrete objects and visual aids. They will	**Understanding Ratios:** - Students will understand what a ratio means, which is like comparing how much of one thing there is compared to another thing. For example, if there are 2 red marbles and 3 blue marbles, the ratio is 2 to 3 or 2:3. - Learners should be able to write ratios in the form of "2 to 3" or "2:3" and know why they are helpful in real life. **Simplifying Ratios:**	**Understanding Ratios:** - Define what a ratio is and recognize that it represents a comparison of two or more quantities. - Express ratios in the form of "a to b" or "a:b" and understand their significance in real-world contexts. **Simplifying Ratios:** - Learn how to simplify ratios to their simplest form by dividing both parts by their greatest common factor. - Apply this simplification process to ratios to make them easier to work with and understand. **Using Ratios to Compare Quantities:** - Apply ratios to compare different quantities or parts within a whole, such as comparing the number of boys to girls in a class.

-Students should feel confident using rounding to make sensible and approximate guesses.	simple estimates in everyday situations, like guessing how many things are in a group or quickly figuring out the total cost of items while shopping. **Discovering Decimal Fraction Equivalents:** - Students will learn how to turn fractions into decimal numbers, using their knowledge of place value and the decimal system. **Understanding Percentages:** - Students will start to get the hang of what percentages are. They will explain that percentages	**Equivalents:** - Convert fractions to their decimal equivalents with an understanding of place value and decimal notation. **Calculating Percentages of an Amount:** -Develop proficiency in calculating percentages of a given amount. Students should be able to use various methods, such as finding a percentage of a number through multiplication or by converting percentages into fractions and decimals. They should also be able to solve practical problems that involve finding a percentage of an	hopefully be able to compare the sizes of different groups of objects and identify when one group has more or less than the other. **Mixing Simple Recipes:** -Introduce the concept of mixing and proportion through simple recipes, such as making fruit squash, fruit salad or a sandwich. - Learners will be given the opportunity to follow basic instructions to combine different ingredients in the right proportions to	- Learners should learn how to make ratios simpler by finding the biggest number that fits both parts. This helps when we have big numbers in a ratio. - Students will be able to practise making ratios easier to use and understand. **Using Ratios to Compare Quantities:** - Students will use ratios to compare how many of one thing there are compared to another thing. For example, they can figure out if there are more boys or	- Solve problems that involve finding one quantity when the ratio and another quantity are given. **Building on the Unitary Method:** - Define the unitary method as a problem-solving approach that involves finding the value of one unit and then extending it to find the total. - Understand that the unitary method is a practical application of proportions. **Expanding Proportion:** - Explain that proportion relates one part to the whole and ratio compares one part to another part or parts. - Recognize that proportions are used to compare quantities in a way that maintains a consistent relationship. **Solving Proportions Problems:** - Learn methods to solve proportions, such as

	show parts out of 100, and they will understand that percentages are a way to talk about how things compare to each other. **Starting to Calculate Percentages of an Amount:** - Learners will learn how to figure out percentages of a given amount. They will use different methods, like multiplying to find a percentage of a number or changing percentages into fractions and decimals. **Beginning to Calculate One Amount as a Percentage of**	amount. Re-cap the idea of 10% as a building block. **Calculating One Amount as a Percentage of Another:** -Enable students to calculate one amount as a percentage of another, emphasising the concept of finding a percentage increase or decrease. They should be able to use this knowledge to solve problems related to discounts, markups, tax calculations, and other real-world applications involving percentages. **Calculating Totals with Money (Including Real-Life Scenarios):**	create a simple dish or drink. **Using Visual Models: -**Teach students to use visual models, such as drawings or pictures, to represent the sharing or mixing of objects or ingredients. They should be able to draw or identify simple visual representations that illustrate equal sharing and proportion. **Practical Application:** **-**Encourage practical application by having students	girls in a class using ratios. - Learners should be able to solve problems where they know one part of the ratio and need to find the other part. It's like finding missing puzzle pieces. **Introduction to the Unitary Method:** - Learners should understand that the unitary method is a way to solve problems. It starts with just one piece, like one chocolate chip, and then helps find out how many chocolate chips are in the whole cookie. - Students will learn that the unitary	cross-multiplication or equivalent fractions. - Apply these techniques to solve problems involving proportions in various contexts, such as recipe scaling or map reading. **Real-World Applications of Ratio and Proportion:** - Apply the concepts of ratio and proportion to solve real-world problems related to scaling, pricing, and mixing ingredients. - Understand how ratio and proportion are used in everyday life, from adjusting recipe quantities to determining distances on maps.

	Another: - Students will learn how to find one amount as a percentage of another. They will focus on understanding what it means to find a percentage increase or decrease. They will use this knowledge to solve problems about discounts, price increases, taxes, and other real-world situations that use percentages. **Exploring Calculating Totals with Money (Including Real-Life Scenarios):** - Learners will find out how to calculate the total cost of items when	- Calculate the total cost of items when given a list of prices and quantities, simulating real-life shopping scenarios. - Apply addition skills to find the sum of multiple items, considering both the value of coins and notes. - Use these skills to create and manage a shopping list during the supermarket visit. **Calculating Change:** - Determine the change to be received after making a purchase by subtracting the total cost from the amount paid. - Accurately count and provide change using a combination of coins and notes. - Practice giving	engage in hands-on activities that involve sharing, proportion, and mixing. For example, they should be able to share a set of toys equally with their peers, compare the sizes of their portions, and help prepare a simple recipe with guidance.	method is a bit like using proportions in real life to make things fair. **Introducing Proportion:** - Learners should know that proportions relate one part to the whole thing. For example, if they have 2 out of 5 apples, that's a proportion. - Students will recognize that proportions are used to keep things fair when comparing quantities, like making sure everyone gets their fair share.	

	they have a list of prices and quantities, just like when they go shopping in real life. - They will add up the prices using coins and notes and practise this skill by making a shopping list for a store visit. **Calculating Change:** - Students will calculate how much change they should get after buying something by taking away the cost from the amount they paid. - They will also be able to count out the right coins and notes to give as change, practising this skill when shopping.	and receiving change during the supermarket visit when making purchases. **Budgeting and Decision-Making:** - Learn to make informed decisions when shopping by comparing prices, evaluating quality, and considering personal preferences. - Set a budget for a shopping trip and make choices that fit within the budget constraints. - Reflect on budgeting and decision-making experiences during and after the supermarket visit. **Practical Application of Money Skills:** - Apply money		**Solving Proportions:** - Students will learn ways to solve proportions, like using tricks such as cross-multiplication or making fractions equal. These tricks help find missing pieces in problems. - Learners should be able to use these techniques to solve problems, like making more cookies from a recipe or finding distances on a map. **Real-World Applications of Ratio and Proportion:** - Learners should use ratios and proportions to solve	

	Discovering Budgeting and Decision-Making: - Students will learn how to make good choices when shopping by comparing prices, thinking about quality, and considering what they like. - They will also start setting a budget for shopping trips and making choices that stay within that budget. **Applying Money Skills Practically:** - Students will use the money skills they learned when shopping for real things, like groceries or personal items, and when doing	skills acquired during the supermarket visit to real-life situations, such as shopping for groceries, personal items, or making everyday transactions. - Gain hands-on experience managing money, making purchases, and handling change in a practical setting.		real-life problems, like making a bigger batch of cookies or figuring out how much something should cost. - Students will understand that ratios and proportions are like maths helpers in everyday life, from cooking to figuring out how far places are on a map. It's maths they use all the time.	

	everyday money transactions. - They will get hands-on experience using money, making purchases, and giving and getting change in real-life situations.				

Cycle Three					
Autumn 1			**Autumn 2**		
Number 1			**Geometry & Measure**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
Understanding Addition: - Build on the concept of addition by applying it to more complex scenarios. - Develop the ability to recognize and apply	**Place Value:** - Students will start learning about place value in numbers up to 1,000.	**Understanding Place Value:** - Extend understanding of place value to numbers up to 1,000.000	**Using a Ruler to Measure Lines:** -Introduce learners to the concept of measurement using a ruler. Help them	**Properties of 2D Shapes:** - Students will describe the properties of 2D shapes, such as number of sides, corners, and if they look the same on	**Classifying 2D Shapes:** - Categorize 2D shapes into broader groups, such as quadrilaterals, triangles, and circles.

addition as a fundamental operation for combining quantities in various contexts, **Understanding Subtraction:** - Extend the understanding of subtraction to more diverse situations where it is necessary to subtract or remove items from a given set. - Identify and solve subtraction problems involving larger numbers and real-world scenarios, such as calculating change or comparing quantities. **Recognizing Mathematical Symbols:** - Continue to learn and recognize mathematical symbols such as addition (+), subtraction (-),	**Column Addition and Subtraction:** - Learners will add and subtract two-digit numbers (between 10 and 99) using column addition and subtraction - Pupils will use formal written methods to solve problems. Pupils will be able to use the column method for addition and subtraction, including borrowing. **Ordering Numbers** - Students will learn to order numbers to at least 1,000. **Multiplication Timetables:** - Pupils will recall multiplication facts	- Recognize the significance of each digit's position in larger numbers, including thousands and hundreds. **Column Addition and Subtraction:** - Apply the vertical column method for addition and subtraction to numbers involving at least 4 digits efficiently. -Pupils will be able to solve problems that involve borrowing and carrying when appropriate. **Ordering Numbers** - Extend the ability to arrange numbers in ascending and descending order to include larger numbers up to 1,000,000	understand how to place a ruler alongside an object or line and count the units to find its length. Focus on measuring lines of different sizes in a hands-on and practical manner. **Identifying Straight Lines:** -Teach learners to recognize and distinguish straight lines from other shapes and objects. Use everyday examples, such as the edges of a book or the sides of a door, to help them identify and understand the characteristics of straight lines. **Recognizing Basic Shapes:** -Introduce simple	both sides (symmetry). - They should find shapes that have specific things, like corners that are exactly 90 degrees or sides that are the same length. **Introducing Perimeter and Area:** - Students will find out how to measure the perimeter of 2D shapes,by adding up all the sides. - They should also learn how to find how much space is inside shapes like rectangles and squares, either by counting small squares or using special maths rules. **Constructing and Drawing 2D Shapes:** - Students will use tools like rulers and protractors to make 2D shapes that have the right size.	- Identify the subcategories within these groups, like isosceles triangles or rhombuses. **Constructing and Drawing 2D Shapes:** - Use rulers, protractors, and other tools to accurately draw 2D shapes with specific dimensions. - Understand how to construct shapes based on given criteria, like drawing a parallelogram with specific angles. **Analysing Real-World Applications of 2D Shapes:** - Apply knowledge of 2D shapes to solve real-world problems, such as calculating the area of a room or determining the shape of a garden. - Recognize and describe the presence of 2D shapes in everyday objects and architecture. **Identifying Types of Angles:**

multiplication (×), and division (÷). - Gain a deeper understanding of how these symbols represent mathematical operations and apply them to more intricate mathematical expressions. **Applying Basic Maths Facts:** - Build upon the recall of basic addition and subtraction facts for numbers 0-5 to include facts for numbers up to 10 or higher. - Apply these facts confidently and efficiently to solve a wide range of mathematical problems, laying the foundation for more advanced mathematical operations.	up to the 12 x table. - They will use these facts to solve multiplication problems with two-digit numbers multiplied by single-digit numbers, getting better at multiplication as they go. **Long Multiplication:** - Students will begin multiplying two-digit numbers by other two-digit numbers using the grid method. - They will use this grid method to solve more complex problems with bigger numbers. **Division Using Written Methods:**	- Demonstrate proficiency in comparing and accurately placing numbers on an expanded number line, including values beyond 1,000,000 **Long Multiplication:** - Advance long multiplication skills to include two-digit by two-digit multiplication using the grid method. - Apply the grid method for multiplication efficiently to solve more complex problems involving larger numbers. **Division Using Written Methods:** - Build on knowledge of division methods by learning and practising the short division method.	geometric shapes like circles, squares, triangles, and rectangles. Help learners identify these shapes in their surroundings and understand their basic properties, such as the number of sides and corners. **Calculating Area in Basic Shapes:** -Begin to introduce the concept of area by focusing on basic shapes like squares and rectangles. Show learners how to count the number of squares inside these shapes to find their area in a visual and concrete way. **Practical Application of**	- They will also know how to make shapes when they get special instructions, like drawing a four-sided shape with certain angles. **Analysing Real-World Applications of 2D Shapes:** - Students will use what they know about 2D shapes to solve problems in the real world, like finding out how much carpet to buy for a room or how to design a garden. - They will also spot and talk about 2D shapes in things we see everyday, like buildings and objects. **Identifying Types of Angles:** - Learners should be able to tell the difference between angles less than and greater than 90 degrees.	-Students should be able to distinguish and correctly identify different types of angles, including acute, obtuse, right, and straight angles, both in written descriptions and geometric figures. **Measuring Angles:** **-**Develop proficiency in using a protractor to accurately measure angles in degrees. **Constructing Angles:** **-**Learn to use a ruler and protractor to draw angles with specified measurements. Students should be able to construct angles of various sizes and types, including acute, obtuse, and right angles, following given instructions or angles from a diagram. **Angles in Real Life:** -Apply knowledge of angle types, angle measurement, and angle construction to solve geometric problems and real-world scenarios. Students should be able to calculate

	- Learners will build on prior learning about division by practising a shorter division method. - They will get better at solving division problems that involve bigger numbers for both the number being divided and the number doing the dividing, and they will also learn how to handle remainders using written methods like short division.	- Develop proficiency in solving division problems involving larger dividends and divisors, including remainders, using written methods such as short division.	**Measurement:** **-**Encourage practical application by having learners measure everyday objects, identify straight lines, and recognize basic shapes in their environment. Provide simple, hands-on activities that reinforce these concepts in a real-world context.	**Measuring Angles:** - Students will be introduced to a protractor to measure angles in degrees, which tells us how big they are. **Introduction to Drawing Angles:** - Students will learn how to use a ruler and protractor to make angles that are a certain size. They can make big angles, small angles, or right angles, following directions or copying from a picture. **Applying Angle Concepts:** - Students will use what they know about angles to solve maths problems and problems in the real world. They will figure out missing angles in shapes, and use angles to help with things like giving directions.	missing angles in triangles, quadrilaterals, and other polygons, as well as use angles to solve problems involving direction and orientation.

Spring 1			**Spring 2**		
Number 2			**Algebra**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
Collecting Data from Simple Observations: - Develop the ability to collect basic data by counting and observing everyday objects or occurrences. - Practice recording the data in a simple, organised manner, such as tally marks or simple drawings.	**Identifying Multiples and Factors:** -Pupils will learn to find pairs of numbers that are factors of a given number and understand what factors and multiples are. **Exploring Problem Solving with**	**Identifying Multiples and Factors:** - Pupils will be able to find common factors of numbers. **Problem Solving with Multiplication and Division:** - Solve problems that involve multiplication and division. - Apply knowledge of factors and	**Solving Simple Equations with Concrete Examples:** - Explore basic equations with a single unknown, using everyday objects like apples or toys to represent numbers.	**Introducing One-Step Equations:** - Learners will learn how to solve one-step equations with addition or subtraction. They should practise using opposite actions to find out what the unknown is, like in equations such as 3 + = 7. **Solving Simple Equations:**	**Understanding Unknowns:** - Define and identify what an unknown is in mathematical expressions. - Recognize and use simple unknowns (e.g., x, y) to represent unknown quantities. **Solving One-Step Equations** - Learn to solve one-step equations involving addition or subtraction. - Practise using inverse operations to isolate the

Creating Basic Pictograms: - Learn to represent collected data using simple pictograms, where each picture or symbol represents one unit of data. - Explore using easily recognizable symbols, like smiley faces or stars, to create the pictograms. **Interpreting Pictograms for Number Patterns:** - Understand that pictograms represent data visually and that patterns can emerge from the arrangement of symbols. - Begin to identify and discuss simple number patterns, such as which symbol appears most frequently or least frequently in the pictogram.	**Multiplication and Division:** - Learners will start solving problems that involve multiplication and division. - They will use their knowledge of factors, multiples, squares, and cubes to solve different kinds of maths problems. **Introduction to Vocabulary of Prime Numbers and Composite Numbers:** - Students will be introduced to new words related to prime numbers, prime factors, and composite numbers. - They will begin to tell the difference between prime numbers and	multiples, as well as squares and cubes, to solve various mathematical problems. **Vocabulary of Prime Numbers and Composite Numbers:** - Define and use the vocabulary related to prime numbers, prime factors, and composite numbers. - Distinguish between prime and composite numbers, understanding their properties. **Reinforcing Vocabulary and Prime Number Recognition:** - Continue to use and understand the vocabulary of prime numbers, prime	- Begin to solve these equations by finding the value of the unknown through physical manipulation, such as counting objects. **Using Shapes and Pictures for Algebraic Ideas:** - Understand that algebraic concepts can be connected to shapes and pictures. - Practise using drawings or shapes to illustrate basic equations, making the idea of unknowns more tangible. **Discovering Balance in Equations:**	- Learners will take their equation-solving skills a step further by using multiplication and division. They should solve equations like 2x = 10 or 15 ÷ y = 3 by doing opposite actions. **Using Expressions to Represent Real-World Scenarios:** - Learners should be able to turn real-world situations into simple maths sentences. They should understand how to write things like "5 more than a number" as maths sentences, like x + 5. **Evaluating Expressions:** - Learners will learn to put numbers into unknowns and figure out the maths sentences. They should calculate things like 2x - 3 when they know what "x" is.	unknown in equations like 3 + x = 7. **Solving Simple Equations with Multiplication and Division** - Extend equation-solving skills to include multiplication and division. - Solve equations like 2x = 10 or 15 ÷ y = 3 by applying inverse operations. **Using Expressions to Represent Real-World Scenarios** - Translate real-world situations into simple algebraic expressions. - Understand how to represent situations like "5 more than a number" as algebraic expressions (x + 5). **Substituting intoExpressions** - Learn to substitute values for unknowns and evaluate algebraic expressions. - calculate the value of expressions like 2x - 3 when x is given.

Extending Pictogram Understanding: - Progress to more complex pictograms, involving larger sets of data and a variety of symbols. - Begin to recognize more intricate number patterns within these extended pictograms and discuss them with guidance.	composite numbers and learn what makes them special. **Building Vocabulary and Recognizing Prime Numbers:** - Learners will continue to use and understand words about prime numbers, prime factors, and composite numbers. - They will practise figuring out whether a number up to 100 is a prime number or a composite number and remember prime numbers up to 19. **Starting with Multiplying using Formal Written Methods:**	factors, and composite numbers. - Determine whether a number up to 100 is prime or composite and recall prime numbers up to 19. **Multiplying with Formal Written Methods:** - Multiply numbers with up to 4 digits by a one or two-digit number. - Utilise formal written methods, including long multiplication, particularly when multiplying by two-digit numbers. **Advanced Multiplication with Formal Methods:** - Further practice multiplying numbers up to 4 digits by one or two-digit numbers.	- Explore the idea of balance by understanding that equations represent a balance between two sides. - Engage with simple equations like "2 + 3 = 5" and "4 - 2 = 2" to grasp the concept of keeping both sides equal.	**Identifying Patterns and Relationships:** - Learners should spot patterns and connections between numbers and unknowns. They should see how changing the value of an unknown affects the maths sentences and equations. **Identify Number Patterns:** - Learners will recognize and talk about number patterns where each number is a certain amount bigger or smaller than the one before it. **Describing Sequences:** - Learners should feel comfortable talking about where a number is in a sequence and what it's called. They should be able to add new numbers to a sequence by following the pattern	**Identifying Patterns and Relationships** - Recognize patterns and relationships between numbers and unknowns. - Explore how changing the value of a unknown affects the outcome in algebraic expressions and equations **Identify Number Patterns:** - Recognize and describe linear number patterns in sequences, highlighting the constant difference between consecutive terms. **Extend Sequences:** -Confidently use the terminology of position and term when describing linear sequences. -Extend existing number sequences both forwards and backwards by applying the identified pattern to predict and generate subsequent terms accurately. **Generalize and Express**

	- Students will learn how to multiply numbers with up to 4 digits by one or two-digit numbers. - They will begin to use formal written methods, like long multiplication, especially when multiplying by two-digit numbers. **Practising Advanced Multiplication with Formal Methods:** - Learners will practise more multiplication, including numbers up to 4 digits by one or two-digit numbers. - They will get better at using formal written methods, especially when	- Extend proficiency in using formal written methods, particularly focusing on long multiplication for two-digit numbers. **Mental Multiplication and Division:** - Develop mental maths skills to multiply and divide numbers. - Draw upon known facts and multiplication tables to perform mental calculations efficiently. **Recognizing Coins and Notes:** - Identify and distinguish various coins and notes, including their denominations and unique features.		they've found. **Using Mathematical language to describe sequences:** - Learners should be able to make general rules for number patterns and say them in words, like "multiply and then add" (term to term rule). **Looking at Real-Life Sequences:** - Learners will use what they know about number patterns to solve real-life problems and maths puzzles. They should be able to find missing numbers or make predictions using these patterns. .	**Pattern:** -Develop the ability to generalise linear number patterns and express rules in words based on multiplying followed by either addition or subtractions. (term to term rule) **Solve Problems Involving Sequences: -**Apply understanding of linear number sequences to solve real-world problems and mathematical puzzles, requiring the recognition and manipulation of such sequences to find missing terms or make predictions.

	multiplying by two-digit numbers. **Beginning Mental Multiplication and Division:** - Students will start developing their maths skills to quickly multiply and divide numbers in their heads. - They will use what they know, like multiplication tables, to do maths quickly in their minds. **Introduction to Recognizing Coins and Notes:** - Learners will learn to tell different coins and notes apart, including their names and special things about them.	- Recognize the monetary value associated with each coin and note. - Apply this knowledge during a visit to a local supermarket, identifying the currency used in transactions. **Making Amounts with Coins and Notes:** - Construct specific monetary amounts using a combination of coins and notes, considering different denominations. - Demonstrate the ability to form amounts accurately and efficiently. - Practise making purchases and paying for items at the local supermarket using			

	- They will know how much each coin and note is worth, and they will use this knowledge when shopping. **Starting to Make Amounts with Coins and Notes:** - Students will begin to make specific amounts of money using different coins and notes. - They will show they can make the right amounts quickly and correctly, and they will practise using money at a store. **Money as an Introduction to Decimals:** - Learners will start to understand how money is	the appropriate currency. **Money as a re-cap on Decimals:** - Understand the connection between money and decimals by recognizing that cents represent parts of a whole dollar. - Begin to use decimal notation when dealing with monetary amounts, such as understanding that £1.50 can be represented as 1.50 pounds. **Calculating Totals with Money (Including Real-Life Scenarios):** - Calculate the total cost of items when given a list of prices and quantities, simulating real-life shopping scenarios.			

	connected to decimals, like how cents are part of a whole dollar. - They will begin using decimal numbers when talking about money, like knowing that £1.50 is the same as 1.50 pounds. **Calculating Totals with Money (Including Real-Life Scenarios):** - Students will learn how to find the total cost of things when they have a list of prices and quantities, just like when shopping in real life. - They will add up the prices using coins and notes, and they will use	- Apply addition skills to find the sum of multiple items, considering both the value of coins and notes. - Use these skills to create and manage a shopping list during the supermarket visit. **Calculating Change:** - Determine the change to be received after making a purchase by subtracting the total cost from the amount paid. - Accurately count and provide change using a combination of coins and notes. - Practice giving and receiving change during the supermarket visit when making purchases.			

	these skills when making a shopping list for a store visit. **Learning to Calculate Change:** - Learners will figure out how much change they should get after buying something by taking away the cost from the amount they paid. - They will also be able to count out the right coins and notes to give as change, practising this skill when shopping. **Exploring Budgeting and Decision-Making:** - Students will start learning how to make good choices when shopping by comparing prices,	**Budgeting and Decision-Making:** - Learn to make informed decisions when shopping by comparing prices, evaluating quality, and considering personal preferences. - Set a budget for a shopping trip and make choices that fit within the budget constraints. - Reflect on budgeting and decision-making experiences during and after the supermarket visit. **Practical Application of Money Skills:** - Apply money skills acquired during the supermarket visit to real-life situations, such as shopping for groceries, personal items, or making			

	thinking about quality, and considering what they like. - They will also start setting a budget for shopping trips and making choices that stay within that budget. **Applying Money Skills Practically:** - Learners will use the money skills they learned when shopping for real things, like groceries or personal items, and when doing everyday money transactions. - They will get hands-on experience using money, making purchases, and giving and getting	everyday transactions. - Gain hands-on experience managing money, making purchases, and handling change in a practical setting.			

	change in real-life situations.				
Summer 1			**Summer 2**		
Ratio & Proportion			**Statistics & Probability**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
Sharing Equally: -Support learners to be able to understand and demonstrate the concept of sharing objects or items equally among a group. Aim to divide a collection of objects into equal parts and ensure that each part has the same number of items. **Recognizing Proportion:**	**Understanding Ratios:** - Students will understand what a ratio means, which is like comparing how much of one thing there is compared to another thing. For example, if there are 2 red marbles and 3 blue	**Understanding Ratios:** - Define what a ratio is and recognize that it represents a comparison of two or more quantities. - Express ratios in the form of "a to b" or "a:b" and understand their	**Understanding Likelihood:** -Help learners understand the concept of likelihood by using everyday examples. Teach them to differentiate between things that are likely to happen, like the sun rising every day,	**Introducing Probability Scales:** - Students will be able to learn about probability scales, a way to measure how likely something is to happen. They should understand that the scale goes from 0 (impossible) to 1 (definitely going to happen).	**Understanding Probability Scales:** - Develop a clear understanding of probability scales, including the concept that probabilities range from 0 (impossible event) to 1 (certain event), and how to interpret probabilities within this scale. **Distinguishing Impossible and Certain Events:**

-Help students recognize the idea of proportion by using concrete objects and visual aids. They will hopefully be able to compare the sizes of different groups of objects and identify when one group has more or less than the other. **Mixing Simple Recipes:** -Introduce the concept of mixing and proportion through simple recipes, such as making fruit squash, fruit salad or a sandwich. - Learners will be given the opportunity to follow basic instructions to combine different ingredients in the right proportions to create a simple dish or drink.	marbles, the ratio is 2 to 3 or 2:3. - Learners should be able to write ratios in the form of "2 to 3" or "2:3" and know why they are helpful in real life. **Simplifying Ratios:** - Learners should learn how to make ratios simpler by finding the biggest number that fits both parts. This helps when we have big numbers in a ratio. - Students will be able to practise making ratios easier to use and understand.	significance in real-world contexts. **Simplifying Ratios:** - Learn how to simplify ratios to their simplest form by dividing both parts by their greatest common factor. - Apply this simplification process to ratios to make them easier to work with and understand. **Using Ratios to Compare Quantities:** - Apply ratios to compare different quantities or parts within a whole, such as comparing the	and things that are unlikely, like finding a rainbow in their bedroom. **Exploring Simple Events:** -Introduce the idea of simple events by presenting basic scenarios with two outcomes, such as flipping a coin to get either heads or tails. Help them grasp the idea that there are only a few possible outcomes in some situations. **Recognizing More and Less Likely:** -Teach very basic comparisons of likelihood, such as recognizing that having sunny	**Introducing Impossibility and Certainty:** - Learners should practise telling apart things that can never happen (0 chance) from things that are sure to happen (100% chance) in stories and maths problems. **Expressing Probability as a Fraction:** - Students will master the skill of showing how likely something is as a fraction. They should remember that 0 means it can't happen, and 1 means it's going to happen for sure. **Simple Probabilities:** - Learners should develop the ability to find out how likely simple	-Learn to distinguish between events that are impossible (with a probability of 0) and events that are certain (with a probability of 1) in various real-world and mathematical scenarios. **Expressing Probability as a Fraction:** - Mastering the skill of expressing probabilities as fractions, recognizing that a probability of 0 means the event cannot occur, and a probability of 1 signifies that the event is guaranteed to occur. **Calculating Simple Probabilities:** -Develop the ability to calculate the probability of simple events by counting favourable outcomes and total possible outcomes, and express these

Using Visual Models: **-**Teach students to use visual models, such as drawings or pictures, to represent the sharing or mixing of objects or ingredients. They should be able to draw or identify simple visual representations that illustrate equal sharing and proportion. **Practical Application:** **-**Encourage practical application by having students engage in hands-on activities that involve sharing, proportion, and mixing. For example, they should be able to share a set of toys equally with their peers, compare the sizes of their portions, and help prepare a simple recipe with guidance.	**Using Ratios to Compare Quantities:** - Students will use ratios to compare how many of one thing there are compared to another thing. For example, they can figure out if there are more boys or girls in a class using ratios. - Learners should be able to solve problems where they know one part of the ratio and need to find the other part. It's like finding missing puzzle pieces. **Introduction to the Unitary Method:**	number of boys to girls in a class. - Solve problems that involve finding one quantity when the ratio and another quantity are given. **Building on the Unitary Method:** - Define the unitary method as a problem-solving approach that involves finding the value of one unit and then extending it to find the total. - Understand that the unitary method is a practical application of proportions. **Expanding Proportion:**	weather is more likely during summer than having snow. Use simple visuals or hands-on activities to illustrate these concepts. **Basic Probability Language:** -Familiarise learners with simple probability words like "likely," "unlikely," "certain," and "impossible." Encourage them to use these words to describe the chances of events happening in their daily lives.	things are by counting the good outcomes and all the possible outcomes. They can express the answer as a fraction or a special kind of number. **Introducing the Probability of Events not occurring:** - Students will learn how to find the chance of the opposite happening, like getting tails when flipping a coin instead of heads. It's like looking at the other side of a coin! **Introducing Probabilities of Multiple Events:** - Learners should explore how to figure out the chance of more than one thing happening at the same time or one or the	probabilities as fractions or decimals. **Understanding the Probability of Complementary Events:** -Learn how to find the probability of complementary events (the event not occurring), such as the probability of getting tails when flipping a coin versus the probability of getting heads. **Calculating Compound Probabilities:** -Explore the concept of compound probabilities, including the probability of two or more events occurring together (joint probability) and the probability of either event happening (mutually exclusive events). **Understanding Mode:**

	- Learners should understand that the unitary method is a way to solve problems. It starts with just one piece, like one chocolate chip, and then helps find out how many chocolate chips are in the whole cookie. - Students will learn that the unitary method is a bit like using proportions in real life to make things fair. **Introducing Proportion:** - Learners should know that proportions relate one part to the whole thing. For	- Explain that proportion relates one part to the whole and ratio compares one part to another part or parts. - Recognize that proportions are used to compare quantities in a way that maintains a consistent relationship. **Solving Proportions Problems:** - Learn methods to solve proportions, such as cross-multiplication or equivalent fractions. - Apply these techniques to solve problems involving proportions in various contexts,		other happening. It's like solving puzzles with probability. **Introducing the Mode:** - Students will define and recognize the mode, which is the number that shows up the most in a group of numbers. They should learn when it helps us understand things better. **Introducing the Range:** - Learners should understand that range is how far apart the highest and lowest numbers are in a group. They should develop the ability to figure out the range and why it's important. **Introducing the Median:**	**-**Define and recognize the mode as the most frequently occurring value within a dataset or list of numbers. Learn to identify situations where mode is a useful measure of central tendency. **Calculating Range:** **-**Understand the concept of range as the difference between the highest and lowest values in a dataset. Develop the ability to calculate the range and interpret its significance in describing data variability. **Determining Median:** **-**Learn to find the median of a dataset by arranging the values in ascending order and identifying the middle value. Explore how the median represents the central value and is less influenced by outliers.

	example, if they have 2 out of 5 apples, that's a proportion. - Students will recognize that proportions are used to keep things fair when comparing quantities, like making sure everyone gets their fair share. **Solving Proportions:** - Students will learn ways to solve proportions, like using tricks such as cross-multiplicatio n or making fractions equal. These tricks help	such as recipe scaling or map reading. **Real-World Applications of Ratio and Proportion:** - Apply the concepts of ratio and proportion to solve real-world problems related to scaling, pricing, and mixing ingredients. - Understand how ratio and proportion are used in everyday life, from adjusting recipe quantities to determining distances on maps.		- Students will learn to find the middle number when putting all the numbers in order. This middle number is called the median. They should explore how it helps find what's in the middle. **Introducing the Mean:** - Learners should understand the mean as the average of all the numbers. They should develop the skill to find it by adding up all the numbers and then dividing by how many there are. They should recognize why it's a good way to talk about data. **Comparing Averages:** - Students will explore situations where mode, range, median, and mean can give different	**Calculating Mean:** **-**Define the mean (average) as the sum of all values in a dataset divided by the total number of values. Develop the skill to calculate the mean and recognize its utility in summarising data. **Comparing Averages:** **-**Explore situations where mode, range, median, and mean may give different results and understand the strengths and limitations of each measure in different contexts. **Application of Averages:** -Apply the concepts of mode, range, median, and mean to analyse and interpret real-world data, such as exam scores, income distributions, and sports statistics, to draw meaningful conclusions and make informed decisions.

	find missing pieces in problems. - Learners should be able to use these techniques to solve problems, like making more cookies from a recipe or finding distances on a map. **Real-World Applications of Ratio and Proportion:** - Learners should use ratios and proportions to solve real-life problems, like making a bigger batch of cookies or figuring out how much something should cost.			answers. They should understand when to use each one and when not to in different situations. **Real World Averages:** - Learners should apply the concepts of mode, range, median, and mean to understand real-life things like test scores, how much people make, or sports scores. They should see how it helps make good decisions and understand the world better.	

	- Students will understand that ratios and proportions are like maths helpers in everyday life, from cooking to figuring out how far places are on a map. It's maths they use all the time.				