Functional Skills Maths Level 1					
Weeks	**Unit**	**Resources**	**Learning Objectives (stratified overleaf)**	**Marking and Assessment**	Classbooks marked weekly. Tasks provided as active feedback for students to respond to. Assessments for progress undertaken at least once every half term but can be performed dependent on need. Formal assessments carried out in line with Pearson Edexcel regulations.
32	Functional Skills Maths Level 1 (Pearson Edexcel)	Class workbooks Calculators Geometry sets Rulers Pencils Graph paper Counters/numcon units CGP Maths level 1 guide	Encourage and develop student's confidence working with numbers up to 5 digits across all fundamental operations. Cultivate students mathematical thinking in application to both maths problems and problems in other subjects. Reinforce understanding of mathematical concepts relating to shape and space; time; money; formulae and calculations. Reinforce students understand of different mathematical methods and cultivate confidence in deploying them in various situations both exam specific and wider world.	**Continuous learning**	Students continuously practice core mathematical functions in real life situations in order to encourage general numeracy. Students also learn methodology as well as the best ways to present these methods to ensure the highest marks possible for exam questions.
				IT	Use of completemaths.com as a support platform. Use of calculators Use of excel to work with graphs and charts and practice data handling skills.
				Independent learning	Students given research projects and data collection activities throughout the term to foster independence and confidence. Complete Maths also available as a platform for students to practice skills with tutors able to track their progress.
				Transferable Skills	Logical Thinking, Understanding of Process and method, resilience, digital literacy, knowledge of financial matters.
				Communication	**1-1 or small group sessions allow for effective role modelling of good communication and the opportunities for students to emulate these. Students are also given opportunities to communicate their own understanding and potential needs to their tutor through self and peer review sessions**

Week/ Session	Content	Learning Objectives: students will be able to	Assessment of Learning	Teaching and Learning Activities	Resources	Adaptation
1	Induction Initial assessment	1. Explain the different achievement quals (key, basic and functional skills) 2. Answer questions on the Profiler assessment	Q&A Answers on the Profiler assessment	• Introduce the Key/Basic/Functional Skills- discuss assessment and portfolio requirements etc. • Paper or computer based diagnostic assessments	Handouts Whiteboard Assessments Computers	
2	Initial assessment 1:1 feedback	1. Complete the profiler assessment 2. Complete autumn term target on progress sheets	Answers on profiler assessment Q&A	• Give 1:1 feedback and complete an ILP with learners	Assessments Computers	
3	Language of Maths Place value	1. Read, write order and compare numbers 2. Discuss negative numbers in practical contexts 3. Read temperatures on a thermometer	Observation of ordering activity Q&A Observation of reading and recording temperature	• Activity – Match figures to words • Worksheet – write the value of a digit in a number • Card activity – order a set of +ve and -ve • Paired activity – measure (more than, less than, equal to) • Paired activity – measure and record body temperatures	Matching cards Thermometers Worksheets Computers	
4	4 Rules of whole numbers	1. Add and subtract using efficient written and mental methods	Checking/marking of the problem solving worksheet & observing the mental maths game	• Discussion – different methods for addition and subtraction • Worksheets - 4 rules	Activity cards Worksheets Follow on game cards	

				• Group activity – follow on game using cards • Group activity – dominoes game • Inverse checking	Dominoes Computer	
5	4 rules of whole number	1. Multiply and divide using efficient written and mental methods	Successful completion of problem solving worksheet & mental maths game	• Discuss – different methods for multiplication and division • Worksheet – 4 rules • Group activity – dominoes game • Inverse checking	Activity cards Worksheets Follow on game cards Dominoes Computer	
6	Rounding and estimating	1. Round numbers to the nearest 10, 100, 1000 to make approximate calculations 2. Estimate to check the answers are reasonable	Checking/marking of worksheet Observing the paired activity – peer assessment Directed questioning	• Discussion – examples of rounding in everyday life • Board work – how to round to nearest 10, 100, 1000 • Worksheets – Round values to the nearest £1, £10 and £100 (e.g. budgeting) • Paired activity – estimate then use calculator to find a total of items bought	Whiteboard Worksheets Calculators Computer	

7	Recap/mini project -applying 4 rules of numbers (formative assessment)	1. Complete project 2. Answer four rules questions using mental maths	Formative assessment of students work Directed questions	• Learners to complete mini project and answer verbal questions on the budget from a small business • Set homework	Mini project Mental maths questions	
8	Intro Fraction Equivalent fractions	1. Read, write order and compare common fractions 2. Correctly match equivalent fractions to each other	Checking/marking of worksheet Observing the activity Directed questioning	• Discussion – examples of fractions used in everyday life (use leaflets) Understand that fractions add up to one whole. • Activity – Matching shaded shapes to fractions • Card activity – matching equivalent fractions	Leaflets Whiteboard Matching cards Worksheets Drag and drop exercise	
9	Find fraction parts of a whole number	1. Calculate fraction parts of whole number quantities and measurement	Observing the activity Checking/marking of worksheet Directed questioning	• Starter activity – equivalent fractions • Board work – finding fraction parts • Worksheets – calculating fraction parts • Fraction of shopping cost	White board Computer Shopping list	
10	Decimals	1. Read, write, order and compare decimals up to three decimal places	Observing the activity	• Discussion - introduce decimal place value	White board	

		2. Add and subtract decimals up to two decimal places 3. Approx decimals by rounding	Checking/marking worksheet Directed questioning	• Activity – order decimal numbers • Worksheet – add and subtract money, rounding money	Ordering cards Computer	
11	X and / by 10 & 100	1. Multiply and divide whole numbers by 10, 100 2. Match equivalent fractions and decimals	Observing the activity Self assessment Directed questioning	• Discussion – how to X and / by 10 and 100 • Activity – Match calculations to answers • Match equivalent decimals and fractions - 1/10, 1/5, ¼, ½ , ¾	Whiteboard Matching cards Computer	
12	Percentages	1. Read, write, order and compare simple percentages 2. Calculate simple percentage parts of whole numbers	Observing the activity Peer assessment Checking/marking of worksheet	• Dicussion – examples of percentages in everyday life (use leaflets) • Card activity – order percentages • Mental and written strategies for calculating percentages • Worksheet – finding simple percentages	Leaflets Cards Whiteboard	
13	Fraction, decimal and percentage equivalencies	1. Match common fraction, decimals and percentages	Observing activities Peer assessment Directed questioning	• Board work – Calculating equivalencies	Whiteboard Quiz questions Worksheets	

				• Small group quiz – calculating fractions, decimals and percentages • Card activity – Match %, decimals and fractions	Matching cards	
14	Recap – Mini project involving fraction, decimals and percentages (Formative assessment)	1. Complete problem solving paper/mini project covering work completed during second half term	Formative assessment of students work Directed questioning	• Learners to complete mini project – finding the most competitive prices to re-decorate a spare room into an office • Set homework according to test results	Mini project	
15	Recap of fractions, decimals and percentages Feedback of first terms topics	1. Apply fraction, decimal and percentage in problem solving situations 2. Review autumn term progress sheet and complete targets for spring term.	Checking/marking worksheet Directed questioning	• Worksheets – problem solving with fractions, decimals and percentages • Feedback with tutor – evaluate students progress with regard to their learning and their personal development	Worksheets Calculator	
16	Ratio and direct proportion	1. Dilute liquids to a given ratio 2. Change quantities in a given recipe	Directed questioning Checking/marking of worksheet Observing the activity	• Discussion – ratio and proportion in everyday life. Discuss scale plans and how they are used.	Whiteboard Worksheets Recipes	

		3. Draw an accurate scale plan of a room using a given scale		• Board work – how to calculate ratio and proportion • Worksheets – calculating ratio and proportion • Activity – diluting liquids • Activity – produce simple plans and scale drawings using given scales	Liquids and containers	
17	Length	1. Write down at least two units of measure for length 2. Estimate and accurately measure lengths of objects 3. Convert between metric measurements for length	Observation of activity Q&A Observation of measuring activity Checking/marking worksheet	• Discuss – metric/imperial units • Activity – estimate, measure and record lengths of items • Board work – how to convert between different units (review X & / by 10, 100 and 1000) • Worksheets – converting between different units • Activity – match metric amounts with different units.	Whiteboard Worksheets Matching cards Measuring instruments	
18	Weights and capacities	1. Write down at least 2 units of measure for weights and capacity	Observation of activity	• Discussion – recap metric and imperial units	Whiteboard Worksheets	

		2. Estimate and accurately measure weight and capacity of objects 3. Convert between metric measurements for weights and capacity	Observation of measuring activity Checking/marking of worksheet Directed questioning	• Activity – estimate, measure and records weights and capacities of items • Board work – How to convert between different units (review X & / by 10, 100 and 1000) • Worksheets – Converting between different units • Activity – match metric amounts with different units.	Matching cards Measuring instruments	
19	Time management	1. Write dates in common formats 2. Write the time in the 12-hour and 24-hour clock	Observation of activity Directed questioning	• Learners to plan a building job • Access rail timetables online • Match dates and times	Matching cards Rail timetable Online game	
20	Problem solving – Measure, shape and space (Formative assessment)	1. Complete practical exercise and receive feedback	Measure classroom and calculate the area and perimeter	• Conversation between metric unit • Calculate the number of pipes that is required for the room	White board Mini project Tape rule	
21	Recap of first half terms topics	1. Complete problem solving test paper covering work completed during first half term	Observation of activity Directed questioning	• Learners to complete problem solving test paper and answer verbal questions	Test paper Mental maths questions	

				• Set homework according to test results		
22	Area and perimeter	1. Accurately calculate perimeter and area of simple shapes	Observe learners calculating area and perimeter of items in the classroom Directed questioning Checking/marking of worksheet	• Discussion on area, perimeter and volume in real life • Board work – calculate area, perimeter • Estimate then calculate the area of perimeter of the objects in the room (table, computer screen etc)	Whiteboard Worksheets Squared paper	
23	Volume	1. Accurately calculate the volume of cubes & cuboids	Observation of activity Successful completion of task. Q&A	• Discussion on volume in real life situations • Worksheets – calculate volume • Activity – Measure and calculate volume of cuboids	Graph/squared paper Whiteboard Internet	
24	Graphs, charts, tables and diagrams	1. Correctly extract and interpret information from lists, tables, charts and graphs	Checking/marking of worksheet Observation of activity – peer assessment Directed questioning	• Discussion – different ways of presenting data • Q&A – extracting information from different sources • Activity – Collect discrete data and	Charts, tables and graphs Quiz questions Worksheets Graph paper	

				present it in different ways • Worksheet - Extracting and interpreting data		
25	Graphs, charts, tables and diagrams	1. Collect, organize and represent discrete data	Observation of activity – peer assessment Directed questioning	• Discussion – different ways of presenting data • Activity – collect discrete data and present it in different ways • Paired quiz – spot the missing information from graph	Charts, tables and graphs Quiz questions Worksheets Graph paper	
26	Mini project – handling data (Formative assessment)	1. Collect and present data in an appropriate graph, chart, table or diagram	Formative assessment of students work Directed questioning	• Activity – Collecting and presenting data – e.g. Investigate the costs involved in doing building job. Find an appropriate way to present findings	Graph sheets Whiteboard	
27	Recap of data handling Feedback to students	1. Complete the revision questions on last terms topics 2. Review spring term progress sheet and complete targets for summer term	Checking/marking of worksheets	• Worksheets – problem solving with data handling • Feedback with tutor – evaluate students progress with regard to their learning and personal development	Worksheets Calculator	

28	Mean (average) and range	1. Calculate mean for a set of up to 10 numbers 2. Calculate the range for a set of up to 10 numbers	Check for correct answers on a group quiz Observation of activity	• Discussion – averages in everyday life • Worksheet - Calculating averages and range • Activity – investigate averages from different sources of data	Whiteboard Worksheets Quiz questions	
29	Probability	1. Express the likelihood of an event occurring 2. Express probability/likelihood as a fraction, percentage or decimal	Checking/marking of worksheet Observation of activity – peer assessment Directed questioning	• Discussion – type of events • Paired activity – investigations using dice etc • Worksheet – finding probability • Computer – Probability game on BBC Skillswise	Dice etc Worksheets Computers	
30	Practice test	1. Complete practice FS and BS assessments 2. Start an Application of Number assessment	Check answers on practice test	• Completing the questions and activities of FS assessment and AoN assignment brief	Assignments Calculators Protractors Pen Paper Graph paper	
31	Summative assessment	1. Start functional skills assessment	Mark work completed	• Completing the questions and activities on FS	Assignments	

		2. Continue on Application of Number portfolio		assessment and AoN assignment brief	Calculators Protractors Pen Paper Graph paper	
32	Introduce Project 1 - planning a holiday	1. Discuss the appropriate research method and resources required to complete the task	Work as a group to determine the things that should be considering when going on holiday	• Gather as much information as possible from internet, brochures and flyers	Project Calculators Protractors Pen Ruler Graph paper	

English **Reading and writing work integrated into lessons through word problems and longer form answers. Vocabulary of Maths also taught and embedded through recall tasks as well as focusing on the language of maths exams and correctly deciphering questions/instructions.**		**Science** Reading exercises make use of scientific developments and texts to both engage and inspire curiosity in the students. The scientific ideas behind certain tasks as well as the neuroscientific basis for pedagogical choices is also explained to students to encourage metacognition and awareness of their learning journey.
IT Researching topics, making use of online information and use computer programs common to employment and adult life. Confidence in both using technology as well as the vocabulary of technology is built through discussion and exercises offering core IT skills practice.	**Geography** Cultural and geographical content in reading and writing exercises as well as group discussions. Students encouraged to reflect upon cultures of themselves, others and the wider world and learn the vocabulary and articulacy to engage with these topics sensitively.	**History** Historical stories and information utilized in reading and writing tasks as well as group discussions. Students urged to reflect upon both their own personal history as well as the larger narratives that have affected their lives and potentially might affect their lives in the future.
PSHE Mutual respect and tolerance of those with different beliefs and backgrounds is enforced during all lessons and group discussions are used as a demonstration of these ideals. Social issues are also prominent in various reading materials and writing exercises to widen students view of society and the issues/topics that affect them.	**Creative** **Creative tasks integrated into lessons consistently both as mandatory tasks and options for type differentiation. Writing for pleasure and as a form of expression is an idea returned to throughout the Scheme of work and given multiple opportunities and classroom time.**	**Assessment opportunities** Continuous and end of term/unit assessments completed. Reflection time and self-evaluations used to gather pupil's thoughts on their own performance and how they can improve next time.
Teaching methods used. Student-centered learning Blended learning Cooperative learning Active learning	**Careers development (Set by the Gatsby benchmark)** Responding positively to help and support and feedback. Recognise the value of challenging themselves and trying new tasks. Developing friendships and relationships and reflecting on their relationships Exploring trends in technology and science	**Core skills** Participate in group discussions in the appropriate way. Ask appropriate questions in an appropriate way. Attempt to solve tasks and use resilience to continue after failure. Be able to identify and suggest logical solutions to problems