

Functional Skills Level 1 Maths Overview

 Intent	 Implementation	 Impact
This Scheme of Work is designed to develop practical and purposeful mathematical understanding for learners working toward Functional Skills Maths Level 1. The curriculum is tailored to suit learners in vocational pathways, particularly those involved in welding and fabrication, ensuring relevance, engagement, and clear links between numeracy skills and real-world application. It sets out to build learners' confidence in handling everyday maths through problem-solving, reasoning, and practical tasks that reflect their future employment contexts. The intent is to: • Build fluency in core numeracy, including number operations, measures, FDP, shape, and data. • Enable learners to apply mathematical skills confidently in vocational and workshop scenarios. • Equip learners with the skills to pass their Functional Skills exam and transition successfully to further education, apprenticeships, or employment. • Encourage learners to see the value of maths in their chosen trade and develop reflective, independent learning behaviours.	The scheme is delivered over 24 weeks with 3 lessons per week, each carefully sequenced to support progression. Lessons are structured to blend CGP Study & Test Practice Book activities with high-impact teaching methods, including interactive starters, modelling, scaffolded tasks, and plenary reflections. Every week concludes with a welding and fabrication-contextualised lesson to reinforce relevance and vocational application. Implementation features: • Differentiated outcomes in every lesson to support inclusive teaching. • Mix of whole-class teaching, group problem-solving, pair work, and individual tasks to cater to various learning styles. • Weekly progression from abstract concepts to practical applications, helping bridge classroom maths and workshop use. • Embedded revision and assessment weeks including mock papers, peer feedback, and applied project work.	The impact of this scheme is seen through learners increased mathematical confidence, fluency in essential numeracy, and ability to transfer maths into vocational tasks. By the end of the course, learners are better prepared to sit and pass their Functional Skills Level 1 exam. More importantly, they understand how maths is a key tool in safe, efficient, and cost-effective workshop practices. Key indicators of impact include: • Improved learner engagement and independence, particularly in vocational settings. • Demonstrable progression in CGP workbook tasks, in-class assessments, and practical application sessions. • Learners can apply maths to welding tasks such as measurements, costs, angles, material usage, and scheduling. • Positive learner feedback regarding maths relevance, usefulness, and real-world value.

			Real-world documents and tasks (e.g. payslips, job cards, timetables, fabrication plans) ensure that learners are always engaged with functional, purposeful content.	Enhanced employability skills and readiness for Level 2 study or workplace numeracy demands.		
Term 1						
Subject	Week 1-2	Week 3-4	Week 5-6	Week 7-8	Week 9-10	Week 11-12
Functional Skills Level 1 Maths	Week 1: Diagnostic and Introduction to Workshop Maths	Week 3: Whole Numbers: Multiplication & Division	Week 5: Fractions: Basic Understanding	Week 7: Money & Budgeting	Week 9: Measures and Units	Week 11: Angles and Direction
	Diagnostic and Introduction to Workshop Maths	Multiplying Whole Numbers	Understanding Fractions	Recognising and Using Money	Units of Measure	Understanding Angles
	Welding & Fabrication Application – Maths in Metalwork	Dividing Whole Numbers	Calculating with Fractions	Budgeting	Metric Conversions	Directions and Turns
	Week 2: Whole Numbers: Addition & Subtraction	Welding Context – Batch Production Calculations	Measuring with Fractions	Welding Context – Job Costing	Welding Context – Material Lengths and Weights	Welding Context – Angles in Welding Joints
	Adding Whole Numbers	Week 4: Rounding and Estimating	Week 6: Fractions, Decimals, Percentages	Week 8: Time and Timetables	Week 10: Shape: 2D and 3D	Week 12: Data Collection and Graphs
		Rounding Numbers	Converting Fractions to Decimals	Reading and Telling Time	2D Shapes	Collecting and Tallying Data
		Estimation	Converting to Percentages	Using Timetables	3D Shapes	Drawing and Reading Graphs
				Welding Context – Project Scheduling	Welding Context – Designing Shapes in Fabrication	Welding Context – Job Log Data

	Subtracting Whole Numbers Welding Context – Steel Stock Control	Welding Context – Cutting and Wastage Estimates	Welding Context – Accuracy and Precision			
Skills Developed						
	Reading and writing whole numbers. Understanding place value in 2- and 3-digit numbers. Applying number recognition in workshop measurements. Performing mental and written calculations. Estimating and checking answers.	Using times tables and division facts. Applying formal methods for larger numbers. Calculating job quantities and distribute materials evenly. Rounding numbers to nearest 10, 100, 1000. Estimating answers to check calculations. Applying estimations to cut lengths and job timing.	Identifying and using simple fractions. Finding fractions of amounts. Cutting and measuring materials in fractional lengths. Converting between FDP. Calculating percentages of amounts. Applying percentage waste, savings, and usage in projects.	Recognising coins/notes and totals. Creating and working within a budget. Costing materials, tools, and welding jobs. Telling time in analogue and digital. Using 24-hour time and reading timetables. Planning welding tasks with realistic timings.	Recognising and converting metric units. Estimating and measuring length, mass, volume. Using measuring tools and scales in welding. Recognising and describing shapes. Understanding properties of 3D forms. Using shape design in brackets and frames.	Identifying and measuring angles. Understanding directional turns. Applying to mitre joints and layout angles. Creating tally charts and bar graphs. Collecting and representing data. Logging workshop output and welding productivity.

	Applying to material costing and dimensions.					
Term 2						
Subject	Week 1-2	Week 3-4	Week 5-6	Week 7-8	Week 9-10	Week 11-12
Functional Skills Level 1 Maths	Week 1: Averages and Range Mean, Mode and Median Range and Comparisons Welding Context – Output Comparison Week 2: Probability Basic Probability Listing Outcomes Welding Context – Predicting Outcomes	Week 3: Practical Application: Bills & Payslips Understanding Bills Interpreting Payslips Welding Context – Welding Contractor Pay Week 4: Revision: Number Skills Review of Addition/Subtraction /Multiplication Review of Division, Rounding, Estimation Welding Context – Applying Core Skills	Week 5: Revision: Measures and Graphs Review of Measures & Conversions Review of Graphs and Averages Welding Context – Production Reports Week 6: Exam Focus: Number and FDP in Welding Non-Calculator Mock (Number & FDP) Calculator Mock (Number & FDP) Welding Application – Mixed Number Scenarios	Week 7: Exam Focus: Measures and Fabrication Non-Calculator Mock (Measures) Calculator Mock (Measures & Shape) Welding Application – Job Plan Measures Week 8: Exam Focus: Graphs, Averages and Reports Non-Calculator Mock (Graphs & Data) Calculator Mock (Data & Averages) Welding Application – Job Analysis Reports	Week 9: Final Project: Mixed Applied Welding Assessment Design Your Welding Job Estimate Time and Cost Final Presentation and Feedback Week 10: Final Preparation Student-led Revision Choice Practice Exam and Reflection Welding Context – Assessment Recap in Metalwork	Week 11: Final Assessment and Reflection Final Assessment Marking and Final Feedback Celebration Project

Skills Developed						
	Calculating mean, median, mode, and range. Comparing data sets. Analysing production trends and quality control. Understanding chance and likelihood. Listing possible outcomes. Predicting job success and material failure risk.	Reading bills and calculating costs. Interpreting payslips and understanding deductions. Comparing contractor earnings and cost analysis. Reviewing all number operations. Solving real-world problems using number skills. Applying totals and estimations to job specs.	Reviewing conversions, measurements, and data handling. Reinforcing use of charts and averages. Analysing material usage and workshop trends. Applying core number and FDP skills in test settings. Using calculation skills under exam conditions. Solving applied fabrication-based questions.	Measuring and geometry skills in exams. Interpreting diagrams and welding layouts. Estimating and calculating materials accurately. Using data and statistical skills. Creating and interpreting graphs from workshop logs. Presenting and analysing trends.	Designing a welding task using combined maths skills. Estimating time, cost, and materials. Justifying decisions with applied numeracy. Consolidating understanding across topics. Revisiting weak areas and peer teach. Applying maths creatively in workshop settings.	Demonstrating full Functional Skills Level 1 competence. Reflecting on progress and learning journey. Presenting how maths supports their welding and career path.

