Functional Skills Maths L1/L2 topic outline

Topic	L1	L2 (in addition to L1)
Number topics		
Place value	Read, write, order and compare large numbers up to one million Recognise negative numbers, e.g. temperature	Order and compare any size positive and negative numbers
Rounding	Approximate whole numbers by rounding Approximate decimals by rounding to a whole number, 10,100,1000 or one or two decimal places	Round decimals when solving practical problems
Number skills	Add and subtract using three digit whole numbers Multiplying and divide whole numbers and decimals by 10,100,1000	
Number skills	Multiply 2 digit whole numbers by single and double digit whole numbers. (Long multiplication) From E3 content. Multiply whole numbers 0x0 to 12x12 and calculate square numbers	
Number skills	Divide 3 digit whole numbers by single and double digit whole numbers	
Order of operations	Solve problems involving positive numbers, using the standard order of operations to solve multi-step calculations	Includes indices
Decimals	Add subtract multiply and divide decimals up to 2 decimal places	Order, approximate and compare decimals Add subtract multiply and divide decimals up to 3 decimal places
Fractions	Simplify fractions to find equivalent forms Find parts of whole number quantities or measurements, e.g. *2/3 or 3/4* Read, write order and compare Mixed Fractions	Express one number as a fraction of another number. Order, add, subtract and compare using proper, improper and mixed fractions

Ratio	Calculate simple ratio and direct proportion	And inverse proportion
Convert between FDP	Recognise and calculate equivalences between common fractions, percentages and decimals. With and without a calculator	Identify equivalencies between fractions, decimals and percentages
Percentages	Calculate simple percentage increase and decrease. Including simple interest and discounts in multiples of 5%	Express one numbers as a percentage of another number Calculate percentage change, and original value after percentage change (reverse percentages) Calculate compound interest
Substitute into Formula	Form word expressions from simple expressions in symbols; evaluate simple expressions and formulae Translate simple word problems into symbols and numbers Including speed distance time	Evaluate expressions and make substitutions in given formulae in words and symbols.
Time & timetables	Read and measure time accurately and use timetables Calculate using time in familiar contexts	Calculate, measure and record time in complex contexts
Handling data topics		
Probability	Use the vocabulary of probability to discuss the likelihood of events Express the likelihood of an event using fractions, and on a scale of 0 to 1	Identify the range of possible outcomes of combined events and record using diagrams or tables including two-way tables Express probability as fractions, decimals and percentages
Averages	Calculate and make statements about the Mean and Range	Calculate and make statements about the Mean and Range and Median and Mode Estimate mean.
Graphs and Charts	Collect, organise and represent discrete data, e.g. tables, diagrams, charts, line graphs , Bar graphs and pie charts.	+ scatter graphs and recognise positive and negative correlation

Shape, space and measure topics		
Conversions	Convert between units of length, weight, capacity, money and time in the same	Convert metric and imperial units of length, weight, and capacity using a) conversion factor and b) a conversion graph
Calculate using compound measures	N/A	Speed distance time, Density mass volume and rates of pay.
Area and Perimeter, Volume.	Work out area, perimeter of simple shapes including those made up of a combination of rectangles. Calculate volume of cubes and cuboids	Calculate perimeters and areas of 2-d shapes including triangles and circles and composite shapes including non-rectangular shapes. Formula not given for triangles or circles)Volume of regular shapes, e.g. cylinders, cuboids Use formulae to in surface areas of 3-D shapes (formula given expect for cylinders)
2D and 3D shapes	Draw 2-d shapes and demonstrate an understanding of lines of symmetry	Understand and use common 2-D representations of 3d objects (nets) Draw 3-D shapes to include plans and elevations
Scale drawings	Recognise and make use of simple scales on maps and drawings Work out dimensions from drawings with simple shapes, e.g. 1cm represents 1m	Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements.
Plans and Elevation	Interpret plans, elevations and nest of simple 2d shapes.	Use co-ordinates in 2-D , positive and negative to specify positions of points.
Angles	Use angles when describing position and direction and measure angles. Bearings and angle facts Points on compass.	