Level 2, 3 Experiences and Outcomes

Leading to National 3 Lifeskills Mathematics

Block	E / O & N3 Codes	Outcome / Description	Learning & Teaching Contexts	Time (periods)	Resources

1	Nat 3 NM 1.1, 1.2, 1.4, 1.5
	
	MNU2-03a
	MNU2-07a
		Selecting and carrying out calculations (**non-calculator**)
		  Add, subtract, multiply and divide whole numbers
		  Use appropriate units when working in context
		Money (£ and pence)
		Length (km, m, cm, mm, yards, miles)
		Weight (kg, g)
		Temperature (Centigrade, Fahrenheit)
		Time (s, min, hour, day, week, month, year)
		Volume (cm^3, m^3).
			A wide range of approaches should be used, including
			    Numerical exercises from textbooks
			    Contextualised examples
			    Investigative work requiring selection and application of numerical skills
			    Software (including Smartboard)
			    Games
				16	<mark>Access 3 Pages 1-21</mark>

1	Nat 3 NM 1.1, 1.2,1.4, 1.5
	MNU2-03b
		Work with decimal fractions (**non-calc**)
		Add, subtract, multiply and divide by single digit.
		Work in context of money.
			A wide range of approaches should be used
			    Exercises from textbook (most can be done without calculator)
			    Contextualized examples
			    Software (including Smartboard)
			    Games
				4	Access 3 Pages 43-48

1	Nat 3 NM2.1 NM2.2 MNU2-20a	Interpret data from a variety of sources.Include tables of information, bar graphs, pictographs, line graphs and pie charts.	Textbook exercises.	8	Acc3 p 61-76
1		**Revision and Block 1 Assessment**		4	Revision sheets available

2	Nat 3 NM 1.2, 1.4, 1.5 MNU 2-07a	Identify fractions from diagrams and draw diagrams to represent fractions. Find simple fractions of an amount.	Textbook resources Reference to pizzas and cakes! Group activity Colouring sheet.	4	Access 3 Pages 22-28 Tarsia (fraction of) Colouring 8
	Nat 3 NM 1.2, 1.4, 1.5 MNU2-07a MNU2-07b	Simple fractions, decimals and percentages in everyday contexts. Equivalent forms of simple fractions, decimals and %	Find simple percentages on a calculator. Understand equivalence of simple fractions and percentages. Use textbook exercises and context (VAT) Computer software (equivalent fractions).	2	Acc 3 P113-114 Fraction Monkeys
2	Nat 3 NM1.2 MNU2-07a MNU2-07b MNU3-07a	Develop understanding of percentages. Find a percentage of a quantity both with and without a calculator. Work out percentage change in context.	Textbook exercises SMP booklets Matching exercise.	10	SMP Booklets (Percentages, Fractions and Decimals) Acc 3 P115,116,118 Tarsia – dominoes
	MNU2-09c	Profit and Loss	Class discussion and textbook exercises	1	Acc3 p 117
	Nat 3 NM2.1 NM2.2 MNU2-20a/b MNU 2-21a And 3-21a	Interpret data from a variety of sources. Include tables of information, bar graphs, pictographs, line graphs and pie charts. Produce an ordered list (eg menu choices) Collect and display data, interpreting and making conclusions	Textbook exercises. Collect and display own collected data.	7	==Access 3 Pages 171-177 Sheets in black folder TJ 3G p142-143==
		Revision & Numeracy Assessment Tasks 1,2&3	**Evidence Gathering**	2	
2	Nat 3 SSM 2.1 MNU 2-11a MNU 2-11b	Use knowledge of sizes of familiar objects to make estimates of measure. Use common units of measure (length, area, volume, weight).	A range of approaches to include Textbook Mind mapping Use real-life containers etc.	10	Acc 3 p77-87 Acc3 p132-143
	SSM1.1	Find the perimeter of simple 2D shapes	Textbook exercises	2	TJD P154-155
		End of term activities	Make chocolate truffles and other things	4	
	Nat 3 NM 2.3 MNU 2-17d	Use a simple scale factor to interpret simple scale drawings.	Use maps and plans. Convert from distances on plan to real-life distances using a basic scale factor.	6	SMP booklets? Acc3 P202-203

	Nat 3 SSM2.1 MNU 2-11a MNU 2-11b	Convert between common units of measurement. (length, weight, volume)	Follows on from previous work on Measurement. Use worksheets and practical examples.	4	Acc 3 Worksheets 12.1, 12.2 In black folder in class. Do not write on sheets.
3	Nat 3 SSM 2.5 MNU2-10a MNU2-10b	Work with various units of time using clocks and calendars. Convert between 12hr and 24hr clocks. Calculate time intervals Read and interpret timetables.	Textbook exercises SMP Booklets Classroom clock set Matching exercise	12	Mathswise 1 P65-66 SMP booklets (Telling the Time Have you the time? Timetables) Time Lapse Time dominoes (Tarsia)
	NM2.3	Making decisions based on Probability Probability line. Calculate simple probabilities. Simplify probability fractions (for more able only). Experimental probability.	Textbook exercises Class discussion using probability line. Practical exercise to work out probability with 2 dice.	6	MIA 3Plus p141-2 MIA 4Plus P141 Sheets from TJ INT1 G8 P 31 (experiment)
		Revision and Numeracy Assessment – Tasks 4 and 5	**Evidence Gathering**	4	
	MNU2-02 And 2-03b	Using a calculator for money calculations	Textbook and class discussion	4	Acc3 P47 - 54
2	Nat 3 MMD 1.1 NM 2.2	Develop understanding of factors affecting income and expenditure for different personal circumstances including . basic pay . income tax . National Insurance . bonus . VAT . bonus	Classroom discussion on rates of pay, whether paid hourly, weekly, monthly or annual. Discuss deductions made from Gross Pay (Nat Ins, tax, union dues etc) Use internet to establish benefits payable. Evaluate deductions and net pay on simplified payslips. Financial planning for one's future.	12	Access 3 Pages 98-100 MiA 4 Plus P80–88 and associated worksheets Mathswise One P63

		. household finance.			
2	Nat 3 MMD 1.2 NM 2.2 MNU 2-09a	Prepare a simple budget. Balancing income and expenditure	Class discussion. Balance income and expenditure for the 6 weeks summer holidays. Choose activities they would like to do. Research costs (internet) and perform calculations for expenditure. Look at ways of earning money to cover costs.	6	Worksheets
		Manage Money and Data Assessment – Tasks 1-3 (Sam's Case Study).	**Evidence Gathering**		
2	Nat 3 MMD 1.3 NM 2.2	Develop a basic savings plan	Investigate cost of an item or activity (eg holiday) and develop a savings plan. Use internet for costs research and produce a sensible plan. RBS "moneysense" can be used to investigate savings plans. Look at financial planning for one's future.	2	RBS "moneysense"
2	Nat 3 MMD 1.4 NM 2.2 MNU2-09b	Make a decision based on "best deal"	Compare 2 products given financial information on each and decide which is the better value. Compare different sources (supermarkets) to find best deal. Is buying bigger always cheaper?	2	Access 3 Pages 107-108 Real life examples.
2	Nat 3 NM 1.2, 1.4, 1.5 MNU2-03b	Work with decimal fractions in context of money.	Should be taught in conjunction with the above as a skills base for Income and Expenditure. money using a calculator	4	Access 3 Pages 43-55 Select as appropriate
		Manage Money and Data Assessment – Tasks 4-5 (Sam's Case Study).	**Evidence Gathering**		
	MMD2.3 MMD2.4	Represent data in an appropriate format. Interpret simple data to draw conclusions.	Exercises from textbook. Collect and display own collected data. Include frequency diagrams, bar graphs, line graphs, pictographs and scatter diagrams.		
		Revise : Percentages on a calculator Interpret data from a variety of sources			
		Manage Money and Data Assessment – Task 6 (Sam's Case Study).	**Evidence Gathering**		

3	Nat 3 SSM 2.5 SSM2.2 MNU2-10a MNU2-10b	Work with various units of time using clocks and calendars. Convert between 12hr and 24hr clocks. Calculate time intervals to manage tasks or activities. Read and interpret timetables, including calculating time intervals.	Textbook exercises SMP Booklets Classroom clock set Matching exercise	12	Mathswise 1 P65-66 SMP booklets (Telling the Time Have you the time? Timetables) Time Lapse dominoes (Tarsia)
		Shape, Space and Measures Assessment **Task 1**	**Evidence Gathering**		
4	Nat 3 SSM1.2 SSM2.1 MNU2-11a MNU2-11c	Establish volume of 3D shapes by counting cubes. Calculate volume of 3D shapes by using a formula, either in words or symbols. Link to capacity – litres and millilitres	Textbook exercises Make solids of given volume Examine volume and capacity of commonly used containers	5	TJ 4G P89-99 Multilink cubes Use real-life containers etc.
3	Nat 3 SSM 1.3 MNU 2-17d MNU 2-18a MNU 3 18a	Follow and give directions Reading from and plotting points on a coordinate grid in the first quadrant	Practical exercises in giving and following directions in class and around school. Use vocabulary, including Left, right, forward, backwards. Use coordinate grids in first quadrant : interpret and plot points.	15	SMP booklets (Maps, Plans and Grids Digging into History Coordinates 1) Software (Billy Bug)

3	Nat 3
	SSM 1.1
	SSM 2.2
	MNU 2-11c
		Find the perimeter and area of simple 2D shapes.	Find area of a rectangle by
			  Counting squares
			  Using a grid
			  Formula
			Find perimeter of simple 2D shapes.
				6	SMP Booklet
					Area 1

3	Nat 3 SSM 1.4	Work with simple patterns. Continue simple patterns in pictures. Complete tables using number patterns. Create simple tiling patterns	Practical exercise to produce tiling patterns Various resources available.	9	SMP tile sheets
	SSM2.4	Apply a basic scale factor	Double or half a volume, area or length.	3	
		Shape, Space and Measures Assessment **Tasks 2 - 5**	**Evidence Gathering**	2	