FUNCTIONAL SKILLS (MATHEMATICS)
MARK SCHEME – LEVEL 2 – SAM

Question	Evidence	Mark	Notes
Jobs			
Q1	Identifies correct calculations	1 or	28 × 29 or 4.80 + 3.40 seen
		2	8.12, 8.20 seen
	Complete method shown	1 or	Attempt to find correct total: "8.12" + "8.20" + 122.50
	States answer	2	138.82
Total marks for question		**4**	
Q2	Considers criteria for at least one person Assume 5 min if intervals are 20 min	1 or	Two of : 9.00 am start: (15 min interval: 5min between each interview):No overlap in rooms
	Intervals: need to see at least 5 consecutive times	2	All of : 9.00 am start: (15 min interval: 5 min between each interview) No overlap in rooms.
	Considers presentation Coordinates two of: time, people, rooms.	1 or	All times given for at least three people or rooms
	Coordinates features time, people, rooms	2	Times and rooms given for all people or people and rooms (correct)
Total marks for question		**4**	
Q3a	Attempt to convert B Correct conversion using 52 weeks OR 48 weeks	1 or 2	30 × 15 seen or implied 21600 OR 23400 seen

Question	Evidence	Mark	Notes
Jobs			
Q3b	C and D salary calcs Monthly or yearly or weekly acceptable Accept use of 52 or 48 weeks in a year, if consistently used Accept use of 4 weeks in a month, if consistently used	1 or	Correct method to convert C **OR** D for comparison: C yearly: 1800 + (0.01(oe) × 22000) (1800 + "220") × 12 (oe) C monthly 1800 + (0.01(oe) × 22000) C weekly (assumes 4 weeks in a month) 1800 ÷ 4 + (22000 × 0.01(oe)) ÷ 4 C weekly (conversion from year) 1800 + (0.01(oe) × 22000) (1800 + "220") × 12 (oe) ÷ 52 **OR** D yearly: 20000 × 1.2 (oe) D monthly: 20000 × 1.2 (oe) ÷ 12 D weekly 20000 × 1.2 (oe) ÷ 52 OR 20000 × 1.2 (oe) ÷ 48
		2 or	Correct method to convert C **AND** D for comparison
	£24240/ 24000 per year £2020/£2000 per month £505/£466.15/ per week (52 wks) £461.54/£500 per week (48 wks)	3 or	Correct answer for C OR D Time periods can be different but accuracy required
	£24240/ 24000 per year £2020/£2000 per month £505/£466.15/ per week (52 wks) £461.54/£500 per week (48 wks)	4	Correct answer for C AND D Time periods can be different but accuracy required
	Comparison of all in same time period	1 or	A, B, C, D in same time period in order to compare
	Decision (D)	2	Correct decision (ft) from their working and their (a). Compares jobs in the same time period. Decision stated clearly comparing jobs in same time period.
Total marks for question		**8**	

Question	Evidence	Mark	Notes
Mid-shire Council			
Q4	Uses figures correct substitution	1 or	$0.55 \times 40.5 \div 9$
		2	2.475
	Makes decision	1	Makes a correct decision based on the information presented.
Total marks for question		**3**	
Q5a	Appropriate graph would be scatter or line graph Accept bar graph	1 or	Attempts to draw a graph on which points can be plotted (minimum is labelled axes, linear scale)
		2 or	Attempts to draw a graph on which 5 points are plotted
	Tolerance of 2 mm when plotting	3	Attempts to draw a graph on which 5 points are plotted, and joined with a curve or a polygon
Q5b	Selects method to use	1 or	Reads from their graph or uses table using linear midpoint
	Interprets information	2	Arrives at an appropriate estimate: ft from their graph if not. Answer in the range 8900 - 9200
Total marks for question		**5**	

Question	Evidence	Mark	Notes
Mid-shire Council			
Q6a	Attempts to find either amount currently	1 or 2	300 ÷ 3 × 71.95 OR 300÷ 3 × 2× 12.21 seen or implied OR 71.95 + 12.21 + 12.21 × 100 oe £9367 seen or implied
Q6b	Attempts to find new cost per day OR find amount of salt in comparison to sand	1 or 2 3	(300) ÷ 4 × 71.95 OR (300) ÷ 4 × 3 × 12.21 seen or implied OR 71.95 + 3 × 12.21 × 75 oe Correct cost of either salt OR sand seen for 1 day 5396.25, 2747.25 Correct cost of either salt AND sand seen for 1 day or total cost for 1 day (8143.5, 5396.25, 2747.25
	Attempts to find cost for 29 days	1 or	Their (a) × 29 OR '8143.5'× 29 seen or implied OR Difference between daily rate found (1223.5)
	Cost for 29 days	2 or	Their (a) × 29 AND '8143.5'× 29 seen or implied OR their Difference between daily rate × 29 seen or implied
	Correct total found	3	Correct difference found 35481.50
Total marks for question		**8**	

Question	Evidence	Mark	Notes
Garden			
Q7	Number of feeds in 1 bottle	1	1500 ÷ 15 oe, 100 feeds per bottle seen, seen or implied
	Number of feeds per set of plants	1 or	12 × 9 OR 12 × 11 × 2 seen or implied OR 9 + (11 × 2) seen or implied OR their total feeds per week × 12
		2 or	12 × 9 AND 12 × 11 × 2 seen or implied OR 9 + (11 × 2) × 12 OR 372 seen
	Total number of bottles	1	4 bottles stated or ft from their total number of feeds ÷ 100
Total marks for question		**4**	
Q8a	Attempt to find volume	1 or	65 × 64 × 120 seen or implied
	Attempt to reduce volume	2 or	"65 × 64 × 120" × 0.4 (oe)
	Correct reduced volume + unit	3	Answer 199680 cm^2 or 19.968 m^2
Q8b	Checking procedure selected	1 or	Attempt to estimate OR attempt to reverse calculation or appropriate other method
		2	Correct estimation OR reverse calculation or appropriate other method
Q8c	Area of plot	1	11 × 7 seen or implied
	Ft from their (a) throughout	1 or	Their (a) converted to litres 199680 ÷ 1000 (cm) or 0.19968 × 1000 seen or implied
	Finds number of litres of compost		
	Finds number of litres needed for plot	2 or	"77" ÷ 0.25 (oe) or "77" × 4
	Correct decision	3	Correct decision supported by their working
Total marks for question		**9**	

Question	Evidence	Mark	Notes
Garden			
Q9	Answer may be shown diagrammatically or use calculations Number of plants attempted May leave gap at ends of plot Allow gap between 30 – 50 cm Allow rows to run along 6 m side or 10 m side of plot	1 or	Finds number of plants in row **OR** number of rows **(No gap, along 6 m side)** 600÷ 37.5, 16 seen or implied (oe) 1000 ÷ 75, 13 seen or implied (oe) **(Gap, along 6 m side)** **"600"** ÷ 37.5,seen or implied (oe). Allow answers [13, 15] "1000" ÷ 75, seen or implied (oe). Allow answers [12, 13] **(No gap, along 10 m side)** 1000÷ 37.5, 26 seen or implied (oe) 600 ÷ 75, 8 seen or implied (oe) **Gap, along 10 m side)** "1000" ÷ 37.5, seen or implied (oe). Allow answers [24, 25] 600 ÷ 75, seen or implied (oe) Allow answers [5, 6]
	Ft from their method	2 or	Their plants in a row × number of rows (ft from 1st mark) Allow answers [120- 208] OR Uses area method 700 × 1000÷ (37.5 × 75),
	Ft from their method	3	Their number of plants × 5
Total marks for question		**3**	