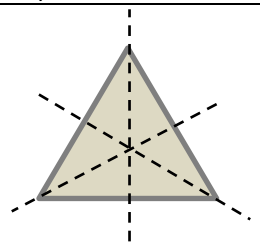
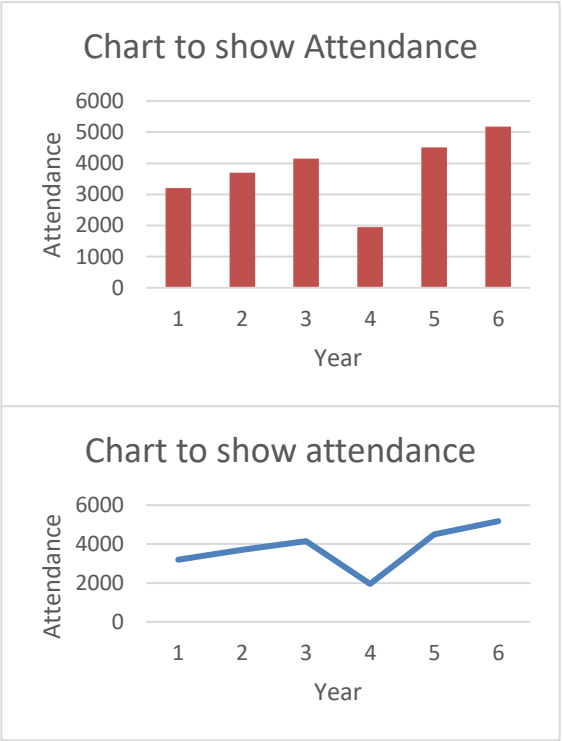
Highfield Functional Skills Qualification in Mathematics at Level 1 - MOCK

PAPERCODE: FSQC109P_MS

Question	Total marks	Content Ref	Process	Marker annotation	Accepted answer AFT = allow follow through CAO = correct answer only OE = or equivalent
Underpinning Knowledge					
1 (Q10 On-screen)	**1**	**5**	Correct substitution into formulae	**1CA**	**CAO** **3.4**
2 (Q11 On-screen)	**1**	**3**	Correct division	**1CA**	**CAO** **(0).022**
3 (Q12 On-screen)	**2**			**2CA**	**CAO** **125 (km)**
		If answer incorrect revert to:			
		21	Interpretation of scale	**1a**	**CAO** 25 x 5
		21	Correct distance	**1b**	**CAO** 125 (km)
4 (Q13 On-screen)	**1**	**24**	All 3 lines drawn	**1CA**	**CAO**  ***(allow reasonable tolerance with the accuracy of lines)***
5 (Q14 On-screen)	**2**			**2CA**	**CAO** **225**
		If answer incorrect revert to:			
		9	Method to calculate three quarters	**1a**	300 x 0.75 OE
		9	Three quarters calculated	**1b**	**CAO** 225

6 (Q15 On-screen)	**1**	**11**	Correct multiplication	**1CA**	**CAO** **1.8018**
7 (Q16 On-screen)	**2**			**2CA**	**CAO** **(£)175**
		If answer incorrect revert to:			
		17	One share calculated	**1a**	**CAO** (£)35
		17	Billy's share calculated	**1b**	**CAO** (£)175
8 (Q17 On-screen)	**1**	**17**	Suitable method shown to check previous question	**1CA**	**Alternative method, reverse calculation or estimation used** E.g. 210 - 175 = 35 or 35 x 6 = 210
Problem Solving					
9 (Q18 On-screen)	**5**			**5CA**	**CAO** **110 (panels)**
		If answer incorrect revert to:			
		20a	Converting lengths to metres	**1a**	**CAO** 3 m or 6 m or 4500cm or 150cm OE *(can be implicit)*
		22b	Identifying 3 missing perimeter lengths	**1b**	**CAO** 39(m) and 39(m) and 36(m) *(second 39m can be implicit)*
		22b	Method to calculate perimeter or panels per length	**1c**	**AFT** 45 + 39 + 39 + 36 + 6 = 165(m) or (45 ÷ 1.5), (39 ÷ 1.5), (39 ÷ 1.5), (36 ÷ 1.5), (6 ÷ 1.5) *(must see at least 3)* OE
		22b	Method to find number of fence panels for perimeter	**1d**	**AFT** (165) ÷ 1.5 or 30 + 26 + 26 + 24 + 4 *(must see at least 3)* OE
		22b	Correct answer	**1e**	**CAO** 110 (panels)

10 (Q19 On-screen)	**3**			**3CA**	**CAO** **435 and Simon**
		If answer incorrect revert to:			
		29	Method to find total of weights	**1a**	method Addition of all weights (=6525)
		29	Correct method to find mean	**1b**	**AFT** – method (6525) ÷15 (=435)
		29	Correct name	**1c**	Simon
11 (Q20 On-screen)	**3**			**3CA**	**CAO** **3/16**
		If answer incorrect revert to:			
		31	Identification of multiples	**1a**	**CAO** 5, 10, 15, 20, 25, 30 OR '6' seen *(can be implicit)*
		31	Using values in fraction	**1b**	**AFT** – method to find fraction (6)/32
		31	Correct fraction	**1c**	**CAO** – simplification 3/16

12 (Q21 On-screen)	**6**			**6CA**	**CAO** **Year 6 = 5175 and chart with correct title, labels and all values plotted**
		If answer incorrect revert to:			
		14	Method to find 15% of 4500	**1a**	**CAO** – method EG 4500 × 0.15 (= 675) **or** 4500 ÷ 100 × 15 (= 675)
		14	Correct value for year 6	**1b**	**AFT** (4500 + 675 = 5175)
		27	Chooses/uses a suitable graph	**1c**	**AFT** E.g. 
		27	Use suitable scale on x and y axis	**1d**	**CAO** EG **1 – 6** and **0 – 5500** or a **broken line – 5500** with equal intervals
		27	Use suitable graph title and labels on x and y axes	**1e**	**CAO** E.g. **Chart to show attendance**, **Year** and **attendance**
		27	All values plotted correctly	**1f**	**CAO** 6 values plotted correctly (allow f/t of their year 6) - allow ± 1mm

13 (Q22 On-screen)	**6**			**6CA**	**CAO** **No and £6746.11** or **No and £746.11 over budget**	
	If answer incorrect revert to:					
		11	Method to find cost of gardeners	**1a**	159.99 × 2 × 12 (=3839.76) OE	
		11	Method to find cost of labourer	**1b**	8.25 × 8(hours) × 12 (=792)	
		11	Both totals correct	**1c**	**CAO** (£)3839.76 **and** (£)792	
		11	Total of costs of gardeners, labourer and materials	**1d**	**AFT** (3839.76 + 792) + 990 (=5621.76)	
		14	Method to find 20%	**1e**	**AFT** (5621.76) × 1.2 OE (=6746.11)	
		2	Correct decision with accurate figures	**1f**	**CAO** No **and** (£)6746.11 or (£)746.11	
14 (Q23 On-screen)	**6**			**6CA**	**CAO** **4 (boxes)**	
	If answer incorrect revert to:					**Alternative method:**
		25	Calculate missing length(s)	**1a**	**CAO** 3(m) **or** 4(m)	
		22	Method to calculate area of one rectangle	**1b**	EG 12 × 9 **or** 6 × 12 **or** "3" × 8 **or** "3" × "4"	
		22	Method to calculate area of the garden	**1c**	EG (12 × 9) – (3 × 4) (=96) **or** (6 × 12) + (8 × 3) (=96) **or** (6x4) + (8x9) = 96(m²)	
		17	Method to calculate weight of seed required	**1d**	**AFT** (96) × 35(g) (=3360)	**AFT** 1000 ÷ 35 = 28.57
		20	Converting units	**1e**	**CAO** (3360) ÷ 1000 (=3.36(kg))	**CAO** (96) ÷ 28.75 = 3.36(kg)
		12	Rounding up to nearest whole kg	**1f**	**AFT** (4)	

15 (Q24 On-screen)	**5**			**5CA**	**CAO** **(£)693**
		20	Converting units	**1a**	**CAO** 10cm = 0.1 m *('10cm' can be implicit if seen in 1b)*
		23	Method to calculate volume	**1b**	13 x 5 x 0.1 (= 6.5)
		12	Rounding up to nearest whole m^3	**1c**	**AFT** (7)
		17	Method to calculate cost	**1d**	**AFT** – method (7) x 99
		2	Total cost	**1e**	**CAO** (£)693