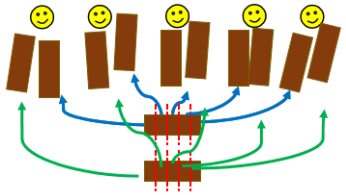
Assessment framework:

		Cognitive domain						
		Knowing (K)		Applying (A)		Reasoning (R)		TOTAL
Content area	Number, operations and relationships (NOR)	1a(1), 1b(1), 2(1), 3a(1), 3b(1), 3c(1), 3d(1), 3e(1), 3f(1), 4(1), 5(2),	12	3g(1), 3h(1), 3i(1), 6(2), 7(1), 8(2)	8	9(2)	2	22
	Patterns, functions & algebra (PFA)	10(2)	2	11a(2)	2	11b(2)	2	6
	Space & shape (SS)	12(1), 14(2)	3	13(1), 15(1), 16(1)	3	17(1)	1	7
	Measurement (M)	18(1), 22(1)	2	19(2) 21(1)	3	20(1)	1	6
	Data handling (DH)	23a(1)	1	23b(1), 24a(1)	2	24b(1)	1	4
	TOTAL	20		18		7		45

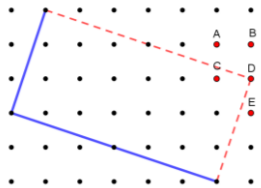
Memo:

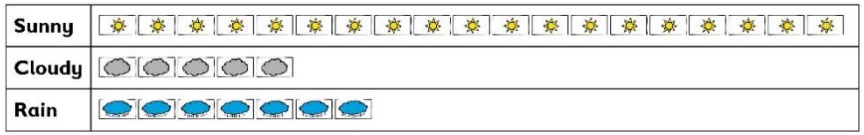
Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
1.a)	1 815	1 mrk: correct	NOR	K	1

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
1.b)	$2\frac{2}{3}$	1 mrk: correct	NOR	K	1
2.	B	1 mrk: correct	NOR	K	1
3.a)	40	1 mrk: correct	NOR	K	1
3.b)	163	1 mrk: correct	NOR	K	1
3.c)	46	1 mrk: correct	NOR	K	1
3.d)	340	1 mrk: correct	NOR	K	1
3.e)	36	1 mrk: correct	NOR	K	1
3.f)	7	1 mrk: correct	NOR	K	1
3.g)	$\frac{2}{3}$ or 2-thirds	1 mrk: correct	NOR	A	1
3.h)	$\frac{9}{6}$ or $\frac{3}{2}$ or $1\frac{1}{2}$ or $1\frac{3}{6}$ (or any of these options in words)	1 mrk: correct	NOR	A	1
3.i)	$\frac{2}{4}$ or $\frac{1}{2}$ (or either of these options in words)	1 mrk: correct	NOR	A	1
4.	$\frac{2}{3}$ or 2-thirds	1 mrk: correct	NOR	K	1
5.	4 *Possible working:* • $5 + 5 \rightarrow 10 + 5 \rightarrow 15 + 5 \rightarrow 20$ • $20 \div 5 = 4$	2 mrks: correct or 1 mrk: correct working	NOR	K	2

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
6.	2 and 2-fifths or $2\frac{2}{5}$ *Possible working:* •  • $12 \div 5 = 2$ with 2 remaining which can be broken into fifths.	2 mrks: correct or 1 mrk: correct working	NOR	A	2
7.	15	1 mrk: correct	NOR	A	1
8.	6 for the small dog; and 9 for the big dog *Possible working:* • 2 3 5 2 3 10 2 3 15 • $15 \div 5 = 3; 3 \times 2 = 6$ and $3 \times 3 = 9$	2 mrks: correct or 1 mrk: correct working	NOR	A	2

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
9.	8 *Possible working:* • $2\frac{1}{2}+2\frac{1}{2}\rightarrow 5+2\frac{1}{2}\rightarrow 7\frac{1}{2}+2\frac{1}{2}\rightarrow 10+2\frac{1}{2}\rightarrow 12\frac{1}{2}+2\frac{1}{2}\rightarrow 15+2\frac{1}{2}\rightarrow 17\frac{1}{2}+2\frac{1}{2}\rightarrow 20$ • 4 water stations in 10 km, so 8 water stations in 20 km.	2 mrks: correct or 1 mrk: correct working	NOR	R	2
10.	A = 160 B = 10	1 mrk: A correct 1 mrk: B correct	PFA	K	2
11.a)	A = 13 B = 31	1 mrk: A correct 1 mrk: B correct	PFA	A	2
11.b)	7 *Possible reasoning:* • Picture 5: 16 matches → +3 → +3 → 22. Therefore, Picture 7. • $22-1\rightarrow 21\div 3\rightarrow 7$	2 mrks: correct or 1 mrk: correct working	PFA	R	2
12.	B	1 mrk: correct	SS	K	1
13.	Pyramid (or square-based pyramid)	1 mrk: correct	SS	A	1
14.	Rectangle and octagon	1 mrk: each correct	SS	K	2
15.	B and D	1 mrk: BOTH correct	SS	A	1

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
16.	A	1 mrk: correct	SS	A	1
17.	D	1 mrk: correct 	SS	R	1
18.	kilometre	1 mrk: correct	M	K	1
19.	6 *Possible working:* • $1\frac{1}{2}$ *L= 1500 ml.* 250 + 250 → 500 + 250 → 750 + 250 → 1000 + 250 → 1250 + 250 → 1500 • 4 × 250 ml cups = 1 litre, 2 × 250 ml cups = $\frac{1}{2}$ litre	2 mrks: correct or 1 mrk: correct working	M	A	2
20.	2	1 mrk: correct	M	R	1
21.	11 February	1 mrk: correct	M	A	1
22.	13:00	1 mrk: correct	M	K	1
23.a)	Coke	1 mrk: correct	DH	K	1
23.b)	13	1 mrk: correct	DH	A	1
24.a)	7	1 mrk: correct	DH	A	1

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
24.b)		1 mrk: correct	DH	R	1