Assessment framework:

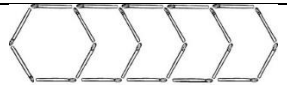
		Cognitive domain						
		Knowing (K)		Applying (A)		Reasoning (R)		TOTAL
Content area	Number, operations and relationships (NOR)	1(1), 2a(1), 3(1), 4a(1), 4b(1), 4c(1), 4d(1), 4e(1), 4f(1)	9	2b(1), 5a(2), 5b(2), 6(2), 8(2)	9	7(2), 9(2)	4	22
	Patterns, functions & algebra (PFA)	10a(1)	1	10b(2)	2	10c(2)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

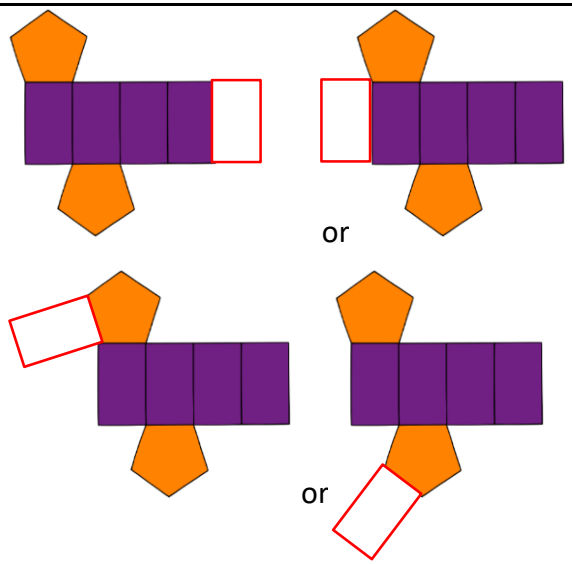
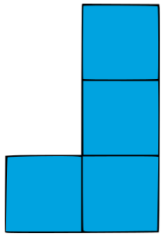
Memo:

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
1.	6 007	1 mrk: correct	NOR	K	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
2.a)	3,1	1 mrk: correct	NOR	K	(1)
2.b)	$6\frac{1}{4}$	1 mrk: correct	NOR	A	(1)
3.	$\frac{3}{5}$	1 mrk: correct	NOR	K	(1)
4.a)	548	1 mrk: correct	NOR	K	(1)
4.b)	20 999	1 mrk: correct	NOR	K	(1)
4.c)	360	1 mrk: correct	NOR	K	(1)
4.d)	192	1 mrk: correct	NOR	K	(1)
4.e)	$24\frac{5}{7}$	1 mrk: correct	NOR	K	(1)
4.f)	8,1	1 mrk: correct	NOR	K	(1)
5.a)	71 *Possible working:* • $9 \times 10 = 90; 9 \times 20 = 180; 9 \times 40 = 360; 360 + 180 \rightarrow 540 + 90 \rightarrow 630 + 9 \rightarrow 639$ • $639 = 630 + 9; 630 \div 9 = 70$ and $9 \div 9 = 1. 70 + 1 = 71$	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
5.b)	6,7 or $6\frac{7}{10}$ *Possible working:* • $7{,}3 = 7\frac{3}{10}; \frac{3}{5} = \frac{6}{10}; \frac{6}{10} + \frac{4}{10} \rightarrow 1 + 6 \rightarrow 7 + \frac{3}{10} \rightarrow 7\frac{3}{10}$ • $\frac{3}{5} = \frac{6}{10} = 0{,}6; 0{,}6 + 0{,}4 \rightarrow 1 + 6 \rightarrow 7 + 0{,}3 \rightarrow 7{,}3$	2 mrks: correct or 1 mrk: correct working	NOR	A	2
6.	4 Possible working: • 2-thirds $\times 6 =$ 12-thirds $\rightarrow$ 12-thirds $= 4$ • $\frac{2}{3} + \frac{2}{3} \rightarrow 1\frac{1}{3} + \frac{2}{3} \rightarrow 2$. Since $3 \times \frac{2}{3} = 2; 6 \times \frac{2}{3} = 4$	2 mrks: correct or 1 mrk: correct working	NOR	A	2
7.	R142 Possible working: • R310 − R26 → R284; R284 ÷ 2 = 142	2 mrks: correct or 1 mrk: correct working	NOR	R	2
8.	13 Possible working: • $60 \times 10 = 600; 600 + 60 \rightarrow 660 + 60 \rightarrow 720 + 60 \rightarrow 780$ • $780 = 600 + 180; 600 \div 60 = 10$ and $180 \div 60 = 3. 10 + 3 = 13$ • $78 \div 6 = 13$	2 mrks: correct or 1 mrk: correct working	NOR	A	2

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
9.	18 Possible working: • 5 biscuits are shared each time; $45 \div 5 = 9 \rightarrow 9 \times 2 = 18$	2 mrks: correct or 1 mrk: correct working	NOR	R	(2)
10.a)		1 mrk: correct	PFA	K	(1)
10.b)	$A = 4, B = 2$	2 mrks: A and B correct or 1 mrk: A or B correct	PFA	A	2
10.c)	82 *Possible explanation*: • $22 + 4 \rightarrow 26 + 4 \rightarrow 30 + 4 \rightarrow 34 + 4 \rightarrow 38 + 4 \rightarrow 42 + 4 \rightarrow 46 + 4 \rightarrow 50 + 4 \rightarrow 54 + 4 \rightarrow 58 + 4 \rightarrow 62 + 4 \rightarrow 66 + 4 \rightarrow 70 + 4 \rightarrow 74 + 4 \rightarrow 78 + 4 \rightarrow 82$ • $22 + 15 \times 4 = 22 + 60$ $= 82$ • $20 \times 4 + 2$	1 mrk: correct and 1 mrk: valid explanation	PFA	R	2
11.a)	7	1 mrk: correct	SS	K	1

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
11.b)		1 mrk: correct *Position must be correct AND rectangle should be congruent to those provided*	SS	A	1
12.	Octagon	1 mrk: correct	SS	K	1
13.		2 mrks: correct diagram	SS	A	(2)
14.	De Wet Road	1 mrk: correct	SS	R	(1)
15.	6:25pm	1 mrk: correct	M	K	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
16.	100 kilograms	1 mrk: correct	M	K	(1)
17.	255	1 mrk: correct	M	A	(1)
18.	18	1 mrk: correct	M	K	(1)
19.	175 km *Possible explanation*: • $100\text{km} + \left(\frac{3}{4} \text{ of } 100\text{km}\right) = 100\text{km} + 75\text{km} = 175\text{km}$	2 mrks: correct or 1 mrk: correct working	M	A	(2)
20.	13 cakes *Possible explanation*: • Count in $1\frac{1}{2}$s; $1\frac{1}{2} \times 13 = 19\frac{1}{2}$ml • 3 ml → 2 cakes (× 6); 18 ml → 12 cakes $+1\frac{1}{2}$ ml → 13 cakes	2 mrks: correct or 1 mrk: correct working $\frac{1}{2}$*ml left over*	M	R	(2)
21.a)	115	1 mrk: correct	DH	K	(1)
21.b)	$115 - 30 = 85$	1 mrk: correct	DH	K	(1)
21.c)	370	1 mrk: correct	DH	A	(1)
21.d)	We cannot tell from the graph	1 mrk: correct	DH	R	(1)