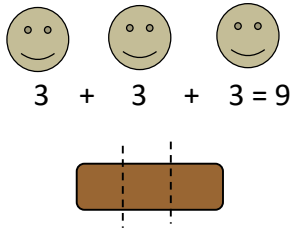
Assessment framework:

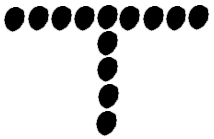
		Cognitive domain						
		Knowing (K)		Applying (A)		Reasoning (R)		TOTAL
Content area	Number, operations and relationships (NOR)	1(1), 2(2), 3(1), 4(5), 7(1),	10	5(4), 6(2), 8(2), 9(1)	9	10(2), 11(2)	4	23
	Patterns, functions & algebra (PFA)	12a(1), 12b(1)	2	12c(2)	2	12d(1)	1	5
	Space & shape (SS)	13(1), 14(1)	2	15(1), 16(1)	2	17(2)	2	6
	Measurement (M)	18(1), 19(1), 20(1)	3	21(1),22(2), 23(1)	1		.	7
	Data handling (DH)	24(2)	2	25(2)	2		·	4
	TOTAL	19		19		7		45

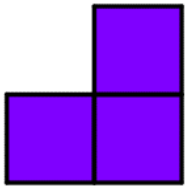
Memo:

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
1.	153	1 mrk: correct	NOR	K	(1)
2.a)	45	1 mrk: correct	NOR	K	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
2.b)	180	1 mrk: correct	NOR	K	(1)
3.	1 025	1 mrk: correct	NOR	K	(1)
4.a)	40	1 mrk: correct	NOR	K	(1)
4.b)	250	1 mrk: correct	NOR	K	(1)
4.c)	4 000	1 mrk: correct	NOR	K	(1)
4.d)	1 099	1 mrk: correct	NOR	K	(1)
4.e)	$\frac{1}{2}$	1 mrk: correct	NOR	K	(1)
5.a)	282 *Possible working:* • $57 + 5 \rightarrow 62 + 220 \rightarrow 282$ • $7 + 5 = 12; 220 + 50 = 270; 270 + 12 = 282$	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)
5.b)	27 *Possible working:* • $62 - 35 \rightarrow 62 - 5 \rightarrow 57 - 30$ • 62–35=60–33	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
6.	18 apples *Possible working:* $10 \times 5 = 50$ $\underline{\ 8 \times 5 = 40}$ 90 $10 + 8 = 18$	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)
7.	1-fifth or $\frac{1}{5}$	1 mrk: correct	NOR	K	(1)
8.	3 and 1-third or $3\frac{1}{3}$ chocolate bars *Possible working:*  	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)
9.	1-third	1 mrk: correct	NOR	A	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
10.	15 muffins *Possible working:* 3×5	2 mrks: correct or 1 mrk: correct working	NOR	R	(2)
11.	26 marbles *Possible working:* $4s + 2$: 6 ; 10 ; 14 ; 18 ; 22 ; 26 ; 30. $5s + 1$: 6 ; 11 ; 16 ; 21 ; 26 ; 31. 6 is too few	2 mrks: correct or 1 mrk: correct working	NOR	R	(2)
12.a)		1 mrk: correct	PFA	K	(1)
12.b)	13 dots	1 mrk: correct	PFA	K	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
12.c)	31 dots *Possible reasoning:* • $13 + 3 \rightarrow 16 + 3 \rightarrow 19 + 3 \rightarrow 22 + 3 \rightarrow 5 + 3 \rightarrow 28 + 3 \rightarrow 31$ • $13 + 3 \times 6 = 31$ • Top row $= 10 + 1 + 10$, Middle column $= 10$ } 31	1 mrk: correct 1 mrk: valid reason	PFA	A	(2)
12.d)	Picture 5	1 mrk: correct	PFA	R	(1)
13.	pentagon	1 mrk: correct	SS	K	(1)
14.	B and D *Note: The diagonal of a rectangle is not a line of symmetry.*	1 mrk: BOTH correct	SS	K	(1)
15.	D	1 mrk: correct	SS	A	(1)
16.		1 mrk: correct	SS	A	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
17.	26 faces *Possible working:* *Each cube has* 6 *faces. There are* 6 *cubes in the arrangement.* *There are* 5 *places where* 2 *faces join.* $5 \times 2 \rightarrow 10$ $6 \times 6 \rightarrow 36 - 10 \rightarrow 26$	2 mrks: correct or 1 mrk: correct working	SS	R	(2)
18.	4	1 mrk: correct	M	K	(1)
19.	metre	1 mrk: correct	M	K	(1)
20.	20 minutes past 10	1 mrk: correct	M	K	(1)
21.	20 minutes to 11	1 mrk: correct	M	A	(1)
22.	25 minutes to 10 (or 09: 35) *Possible working:* 10 min to 9 + 10 min→ 9 o'clock + 30 min → half past 9 + 5 min → 25 minutes to 10	2 mrks: correct or 1 mrk: correct working	M	R	(2)
23.	B	1 mrk: correct	M	A	(1)
24.a)	Nike	1 mrk: correct	DH	K	(1)
24.b)	11	1 mrk: correct	DH	K	(1)
25.	120 *Calculation:* 6×20	1 mrk: correct answer 1 mrk: correct calculation	DH	A	(2)