Assessment framework:

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

Memo:

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
1.a)	5 500	1 mrk: correct	NOR	K	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
1.b)	$5\frac{1}{3}$	1 mrk: correct	NOR	A	(1)
2.	A	1 mrk: correct	NOR	K	(1)
3.	18 060	1 mrk: correct	NOR	K	(1)
4.	also multiples of 3	1 mrk: correct	NOR	A	(1)
5.a)	5 500	1 mrk: correct	NOR	K	(1)
5.b)	6,54	1 mrk: correct	NOR	K	(1)
5.c)	11 500	1 mrk: correct	NOR	K	(1)
5.d)	28	1 mrk: correct	NOR	A	(1)
5.e)	1,7 or $1\frac{7}{10}$	1 mrk: correct	NOR	A	(1)
6.a)	613 *Possible working:* • $300 + 200 = 500$; $60 + 40 = 100$; $8 + 5 = 13$ and $500 + 100 + 13 = 613$ • $368 + 200 \rightarrow 568 + 40 \rightarrow 608 + 5 \rightarrow 613$ • $370 + 243 = 500 + 113 = 613$	2 mrks: correct or 1 mrk: correct working	NOR	K	(2)
6.b)	11,50 *Possible working:* • $33{,}25 - 21 \rightarrow 12{,}25 - 0{,}25 \rightarrow 12 - 0{,}50 \rightarrow 11{,}50$	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
6.c)	7,4 or $7\frac{4}{10}$ or $7\frac{2}{5}$ *Possible working:* • $4{,}6 + 2{,}8$ • $4\frac{6}{10} + 2\frac{8}{10}$	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)
6.d)	$\frac{7}{8}$ *Possible working:* • $\frac{1}{8} + \frac{1}{2} + \frac{1}{4} = \frac{1}{8} + \frac{4}{8} + \frac{2}{8}$	2 mrks: correct or 1 mrk: correct working	NOR	R	(2)
7.	$\frac{1}{8}$ *Possible working:* • Nicole ate $\frac{1}{2}$ of 8 slices $= 4$ slices; $\therefore$ 4 slices left 4 slices $\div$ 4 friends $= 1$ slice each	2 mrks: correct or 1 mrk: correct working	NOR	A	(2)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
8.	A = *R*9; *B* = *R*12 *and C* = *R*7 *Possible working:* If A + B = R21, then C must be: R28 − R21 = R7 If B + C = R19, then B must be: R19 − R7 = R12 If A + B = R21, then A must be: R21 − R12 = R9	3 mrks: all correct or 2 mrks: at least 1 correct with some correct working shown or 1 mrk: 1 correct with no working or none correct, but some correct working	NOR	R	(3)
9.a)	10	1 mrk: correct	PFA	K	(1)
9.b)	21	1 mrk: correct	PFA	A	(1)
9.c)	12 *Possible working:* • Picture 3 has 6 squares; P4 = 10; P5 = 10 + 5 = 15; P6 = 15 + 6 = 21; P7 = 21 + 7 = 28; P8 = 28 + 8 = 36; P9 = 36 + 9 = 45; P10 = 45 + 10 = 55; P11 = 55 + 11 = 66; P12 = 66 + 12 = 78	2 mrks: correct or 1 mrk: correct working	PFA	R	(2)
10.	$(17 - 8) \times 12 = 108$	1 mrk: correct	PFA	A	(1)
11.a)	Forest	1 mrk: correct	SS	K	(1)
11.b)	H3	1 mrk: correct	SS	K	(1)
12.	C	1 mrk: correct	SS	K	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
13.	C	1 mrk: correct	SS	A	(1)
14.	pentagon	1 mrk: correct	SS	K	(1)
15.	14	1 mrk: correct	SS	R	(1)
16.	B	1 mrk: correct	SS	A	(1)
17.	10 cm	1 mrk: correct	M	K	(1)
18.	1 200 *Possible working:* • $240 + 240 \rightarrow 480 + 240 \rightarrow 720 + 240 \rightarrow 960 + 240 \rightarrow 1200$ • $10 \times 240 \div 2 = 2\,400 \div 2$	2 mrks: correct or 1 mrk: correct working	M	K	(2)
19.	36	1 mrk: correct	M	A	(1)
20.	69 *Possible working:* $03{:}42{:}22 + 38$ seconds $\rightarrow 03{:}43{:}00 + 31$ seconds $\rightarrow$ $03{:}43{:}31$; 38 seconds + 31 seconds	2 mrks: correct or 1 mrk: correct working	M	A	(2)
21.a)	May	1 mrk: correct	DH	K	(1)
21.b)	March	1 mrk: correct	DH	K	(1)
21.c)	18	1 mrk: correct	DH	A	(1)

Question	Correct solution(s)	Comment	Content area	Cognitive domain	Mark allocation
21.d)	Even though it only had 10 rainy days in the month, a lot of rain fell per rainy day.	1 mrk: correct	DH	R	(1)