

National curriculum tests

Key Stage 2

Mathematics test mark schemes

Practice Paper 1-2: arithmetic

Practice Paper 2-2: reasoning

Practice Paper 3-2: reasoning



Structure of the key stage 2 mathematics test

The key stage 1 mathematics test is administered on paper and comprises:

- Paper 1: arithmetic (40 marks)
- Paper 2: reasoning (35 marks)
- Paper 2: reasoning (35 marks)

Each paper includes material drawn from the statutory section of the key stage 1 national curriculum (2014). Details of content references can be found at :

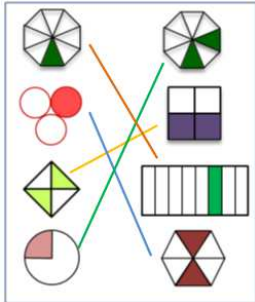

- www.mathsmadeeasy.co.uk/maths-year-3.htm
- www.mathsmadeeasy.co.uk/maths-year-4.htm
- www.mathsmadeeasy.co.uk/maths-year-5.htm
- www.mathsmadeeasy.co.uk/maths-year-6.htm

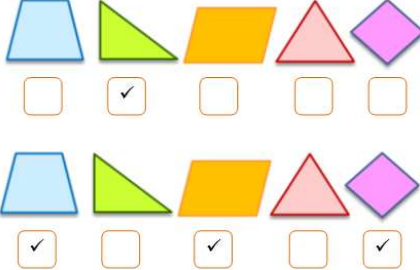
Answers for Paper 1: arithmetic

Question	Answer	Mark	Reference
1	101	1	3N2b
2	2280	1	4C7
3	0.93	1	4F9
4	8.9	1	4F8
5	50	1	3C3
6	6	1	4C6a
7	402	1	4C6a
8	231	1	3C1
9	3.46	1	4F8
10	69,600	1	5C2
11	36	1	5C5d
12	230	1	5C6b
13	110	1	5C6a
14	70	1	6R2
15	15.84	1	6F9b
16	0.813	1	5F8
17	$\frac{6}{7}$	1	3F4
18	1341	1	5C7b
19	11,561	1	5C2
20	7.91	1	5F10
21	7000	1	5C6b
22	27	1	5C5d
23	304	1	6C7a
	1520+		
	1824	1	
24	$17 90 = 5r 5$		6C7b
	$17 51 = 3$	1	
	53	1	


25	10,773 251370+ 262143	1 1	6C7a
26	9.43	1	5F10
27	1/12	1	6F5a
28	24	1	5F5
29	198	1	6R2
30	0	1	6C9
31	2/7	1	6F5b
32	29 136= 4r 20 29 203 = 7 47	1 1	6C7b
33	4/5 or 8/10	1	6F4
34	37.5% or 0.375	1	6F6
35	18667	1	5C2
36	80 - 7 = 73	1	6C9

Answers for Paper 2: reasoning

Question	Answer	Mark	Reference
1	90	1	3N2a
2	$100 - 7 \times 5 =$ 65	1 1	3C8
3	$50 - 20 = 30\text{cm}$ $50 - (-40) = 90\text{cm}$	1 1	4S1
4		1 for 2 correct 2 for all	4F1
5	$5 \frac{1}{2} \times 60 = 330$ minutes	1	4M4c
6	2 year 3 months	1	5M4
7	 any route with multiples of 7	1	5C5a
8	$20 \times 30 + 50 = 650\text{p}$ or £6.50 $500\text{p} - 50\text{p} \div 30 = 450 \div 30$ =15 marbles	1 1 1	6A2
9	14cm	1	3M2a
10	120°	1	5G4

11	$\begin{array}{r} \\ \\ \\ \hline \\ \\ \hline \end{array}$	1 mark for each correct 1	5M9c
12	- 8, - 6, - 5, - 2, - 1, 0, 2	1	5N5
13	0.014 - 0.012 = 0.002 m	1	5F10
14		1 1	3G2
15	250,000 250,000 249,600	All correct 2 marks otherwise 1 mark	5N4
16	a = 180-58 = 122° b = 180 - 65 - 70 = 45°	1 1	6G4a/b
17	2x75+90+10x26 = 500 50p	1 1	6C8
18	30.6+27.8+28.9+29.4+32.5+ 31.7+29.1 = 210 210÷ 7 = 30kg	1 1	6C8
19	¼ of 36 = 9 girls ½ of 48 = 24 boys	1 1	6S1
20	1 - ¾ = ¼; 2.4kg is ¼ of bag 2.4x4 = 9.6kg	1 1	6R4
21	500 g in ½ kg 1 gram: 230÷500 =£ 0.46 or 46p	1 1	6F10

Answers for Paper 3: reasoning

Question	Answer	Mark	Reference
1	12 8 18 7,14 etc	2 marks for all correct otherwise 1	5C5a
2	$2 - 5 = - 3C$ $2+5 = 7C$	1 1	5N5
3	 3	1 1	5N5a 5F6b
4	Henry, Laura, Jane £100	1 1	4S1
5	$600 + 150 = 750\text{ml}$	1	3M9
6	123.4×1000 $123.4 \div 1000$ $123.4 \div 10$	2 marks for all correct otherwise 1	5C6b
7	Ninety eight thousand seven hundred and fifty four	1	5M2
8	(3 , 5)	1 for each correct co-ordinate	6P2
9	$50+25+15=90\text{g}$ each $15 \times 90 = 1350\text{g}$ or 1.35kg	1 1	5M9c
10	$10 \times 7 \times ? = 350$ $? = 5\text{cm}$	1 1	5M9d
11	lemon $112 \div 4 = 28\text{p}$ orange $175 \div 5 = 35\text{p}$ orange costs 7p more	1 1	4F10b

12	$\begin{array}{r} \boxed{1} \boxed{2} \boxed{3} \boxed{4} \\ + \quad \boxed{8} \boxed{7} \boxed{5} \\ \hline \boxed{2} \boxed{1} \boxed{0} \boxed{9} \end{array}$ $\begin{array}{r} \boxed{1} \boxed{4} \boxed{6} \boxed{7} \\ - \quad \boxed{9} \boxed{7} \boxed{5} \\ \hline \boxed{4} \boxed{9} \boxed{2} \end{array}$	1 1	4C2
13	$7.86+5.69= 13.55\text{km}$	1	5F10
14	$2/3 < 9/12 < 7/9$ $2/3 < 7/9 < 5/6$ $9/12 < 7/9 < 5/6$	1	5F3
15		all correct for 2 marks	6F9
16	Drawn correctly	1	6G3a
17	$8/20 = 40/100 = 40\%$	1	5F12
18	$50 \div 2.5 = 20$ $20 - 11 = 9$ $9 \times 6 = 54$	1 1	6C8
19	1 token width = $45 \div 15 = 3\text{cm}$ 4 tokens is 12cm stack is now $45 - 12 = 33\text{cm}$	1 1	6R1
20	$66 \times 102 = 6732$ $6732 \div 17 = 396 \text{ boxes}$	1 2	6C7a/6C7b

This mark scheme does not offer additional guidance. and it is left to the class teacher to determine outcomes. The government mark scheme should act as a guideline