THIRD SPACE LEARNING

Key Stage 2 SATs Paper 1: Arithmetic Pack 2

Mathematics Practice Test and Mark Scheme

Year 6

Name: ..... Class: .....

School: ..... Score: .....

Instructions

You **may not** use a calculator to answer any questions in this test.

Questions and answers

- Work as quickly and as carefully as you can.
- Put your answer in the box for each question.

- All answers should be given as a single value.
- For questions expressed as common fractions or mixed numbers, you should give your answers as common fractions or mixed numbers.
- If you cannot do a question, **go on to the next one**. You can come back to it later, if you have time.
- If you finish before the end, **go back and check your work**.

Marks

- The number under each box at the side of the page tells you the maximum number of marks for each question.
- In this test, long division and long multiplication questions are worth **TWO** marks each. You will be awarded **TWO** marks for a correct answer. You may get **ONE** mark for showing a formal method.
- All other questions are worth **ONE** mark each.
- If you finish before the end, **go back and check your work**.

Questions

1 $44 \times 2 =$

1 mark

2 $3{,}735 + 100 =$

1 mark

3 $459 \times 0 =$

1 mark

4 $742 - 8 =$

1 mark

5 $\square = 56 \div 7$

1 mark

6 $69{,}997 + 5{,}601 =$

1 mark

7 ☐ = 6,853 – 684

1 mark

8 5 x 7 x 4 =

1 mark

9 8.4 + 0.3 =

1 mark

10 $726 \div 6 =$

1 mark

11 $3 - 12 =$

1 mark

12 $91 = \square \times 7$

1 mark

13 $263 \div 100 =$

1 mark

14 $26.8 + 1.002 =$

1 mark

15 $40 \times 300 =$

1 mark

16 2,407,562 – 10,000 =

1 mark

17 $\frac{3}{7} + \frac{2}{7} =$

1 mark

18 1,000 x 30.7 =

1 mark

19 7,700 ÷ 11 =

1 mark

20 24.325 – 9.63 =

1 mark

21 10,000,000 – 101 =

1 mark

22 $\frac{1}{6} + \square = \frac{5}{12}$

1 mark

23 $8^2 + 17 =$

1 mark

24 $1\frac{4}{9} \times 3 =$

1 mark

25 $\frac{5}{6}$ of 240 =

1 mark

26 2.56 x 7 =

1 mark

27

$$1\ 9 \overline{)\ 4\ 5\ 6}$$

Show your method

2 marks

28 30% of 3,200 =

1 mark

29

$$\begin{array}{r} 46 \\ \times\ 23 \\ \hline \end{array}$$

Show your method

2 marks

30 $\frac{3}{4} \div 3 =$

1 mark

31 $7 + 3 \times 5 =$

1 mark

32 $27\overline{)1431}$

Show your method

2 marks

33 $\frac{4}{7} \times \frac{5}{8} =$

1 mark

34

Show your method

$$\begin{array}{r} 5\,2\,0\,8 \\ \times\quad 7\,6 \\ \hline \end{array}$$

1 mark

35

$3\frac{1}{4} - 1\frac{2}{3} =$

2 marks

36

$\frac{6}{7} \div 4 =$

2 marks

Mark Scheme

The instructions and principles of this mark scheme closely follow the guidance in the 2016 national curriculum tests. We have deliberately not set a limited time for the test paper as a teacher may want to vary it according to the standard individual children are working at.

The national curriculum test allows 30 minutes to complete this test.

Answers

Question Number	Requirement	Mark	Additional guidance	Content Domain Ref	NC strand
1	88	1m		5C6a	Calculations
2	3,835	1m		3N2b	Number
3	0	1m		4C6b	Calculations
4	734	1m		3C1	Calculations
5	8	1m		3C7	Calculations
6	75,598	1m		5C2	Calculations
7	6,169	1m		4C2	Calculations
8	140	1m		4C6b	Calculations
9	8.7	1m		5f10	Fractions
10	121	1m		5C7b	Calculations

Question Number	Requirement	Mark	Additional guidance	Content Domain Ref	NC strand
11	-9	1m		6N6	Number
12	13	1m	**Do not** accept 9	3C7	Calculations
13	2.63	1m		5C6b	Calculations
14	27.802	1m		5F10	Fractions
15	12,000	1m		5C6a	Calculations
16	2,397,562	1m		5C2	Calculations
17	$\frac{5}{7}$	1m	**Accept** equivalence	4F4	Fractions
18	30,700	1m		6F9a	Fractions
19	700	1m		5C6a	Calculations
20	14.695	1m		5F10	Fractions
21	9,999,899	1m		5C2	Calculations
22	$\frac{3}{12}$ or $\frac{1}{4}$	1m	**Accept** equivalence	5F4	Fractions

Question Number	Requirement	Mark	Additional guidance	Content Domain Ref	NC strand
23	81	1m		6C9	Calculations
24	$3\frac{12}{9}$ or $4\frac{1}{3}$	1m	**Accept** equivalence	5F5	Fractions
25	200	1m		4F10a	Fractions
26	17.92	1m		6F9b	Fractions
27	Award **TWO** marks for the correct answer of 24 If the answer is incorrect, award **ONE** mark for the formal methods of division with no more than **ONE** arithmetical error, i.e. • long division algorithm, e.g. 24 r 2 19 ⟌ 456 - 380 (20 × 19) 76 - 74 (4 × 19) 2 *(error)* OR 24 r 10 19 ⟌ 456 - 38 (2 × 19) 86 *(error)* - 76 (4 × 19) 10 • short division algorithm, e.g. 23 r 18 19 ⟌ 4 5⁷6	1m	Working must be carried through to reach a final answer for the award of **ONE** mark. Short division methods must be supported by evidence of appropriate carrying figures to indicate the use of a division algorithm, and be a complete method. The carrying figure must be less than the divisor.	6C7b	Fractions

Question Number	Requirement	Mark	Additional guidance	Content Domain Ref	NC strand
28	960	1m		6R2	Ratio
29	Award **TWO** marks for the correct answer of 1 058 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetical error, e.g. 46 × 23: 138 + 920 = 1048 (error) OR 46 × 23: 138 (error) 920 = 1048	Up to 2m	Working must be carried through to reach a final answer for the award of ONE mark. Do not award any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens: 46 × 23: 138 + 92 *(place value error)* = 230	5C7a	Calculations
30	$\frac{1}{4}$	1m	**Accept** equivalence	6F5b	Fractions
31	22	1m		6C9	Calculations

Question Number	Requirement	Mark	Additional guidance	Content Domain Ref	NC strand
32	Award **TWO** marks for the correct answer of 53 If the answer is incorrect, award **ONE** mark for the formal methods of division with no more than **ONE** arithmetical error, i.e. • long division algorithm, e.g. 54 r 13 27 | 1431 - 1350 (50 x 27) 0121 *(error)* 108 (4 x 27) 13 OR 54 r 3 27 | 1431 - 135 (50 x 27) 0081 78 *(error)* (3 x 27) 3 • short division algorithm, e.g. 53 r 10 27 | 1439 1 *(error)*	Up to 2m	Working must be carried through to reach a final answer for the award of **ONE** mark. Short division methods must be supported by evidence of appropriate carrying figures to indicate the use of a division algorithm, and be a complete method. The carrying figure must be less than the divisor.	6C7b	Calculations
33	$\frac{5}{14}$	Up to 2m	**Accept** $\frac{20}{50}$ or equivalent fraction	6F5a	Fractions

Question Number	Requirement	Mark	Additional guidance	Content Domain Ref	NC strand
34	Award **TWO** marks for the correct answer of 395 808 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetical error, e.g. 5208 x 76 = 31248, 364560+ = 395708 *(error)* OR 5208 x 76 = 31208 *(error)*, 364560+ = 395768	1m 1m 1m	Working must be carried through to reach a final answer for the award of **ONE** mark. **Do not award** any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens:	6C7a	Calculations
35	$1\frac{7}{12}$	Up to 2m		6F4 6F5b	Fractions Fractions
36	$\frac{3}{14}$	Up to 2m		6F4 6F5b	Fractions Fractions

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