



KS2 SATS MAY 2020

The Olive School Hackney

‘Nurturing Today’s Young People, inspiring tomorrow leaders’

***KS2 SATS Guidance for Parents
2020***

Maths

**Numeracy is broken down into 3 papers.
They are:**

Paper 1 - Arithmetic (30 minutes)

Paper 2 - Reasoning paper (40 minutes)

Paper 3 - Reasoning paper (40 minutes)

Maths Scaled Scores from 2019.

A raw score (actual score) of 58/110 counts as a pass. 95 and above is a scaled score of 110 which is a Greater Depth.

Raw score	Scaled score
0 - 2	No scaled score
3	80
4	80
5	80
6	81
7	82
8	82
9	83
10	84
11	84
12	85
13	85
14	86
15	86
16	87
17	87
18	88
19	88
20	89
21	89
22	89
23	90
24	90
25	91
26	91
27	91
28	92
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95	110
96	110
97	110
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102	113
103	113
104	114
105	115
106	116
107	117
108	118
109	120
110	120

Paper 1 - Arithmetic

This arithmetic paper is made up of around 36 number-focused questions, that challenge pupils to use addition, subtraction, multiplication and division. In this paper, children will be required to use percentages, fractions and decimals too.

Paper 1 - Arithmetic

The paper is out of 40 marks. Children should aim to achieve a score from 35-40 in order to give them a better chance at gaining a higher scaled score when all three papers have been combined together.

For example, if a child scores the following:

Paper 1 – 37/40

Paper 2 – 25/35

Paper 3 - 23/35

Total: 85/110

Scaled Score: 106 (EXS)

Arithmetic

23

$$0.5 \times 28 =$$

☐

1 mark

30

$$99\% \text{ of } 200 =$$

☐

1 mark

24

$$\frac{1}{2} + \frac{1}{5} =$$

☐

1 mark

31

$$\frac{1}{4} \div 2 =$$

☐

1 mark

25

$$1\frac{3}{4} + \frac{3}{4} =$$

☐

1 mark

32

$$9^2 - 36 \div 9 =$$

☐

1 mark

Approximately, 2/3 questions in the Arithmetic paper will be out of 2 marks. This is because they would like children to show their method of calculation. 2 mark questions are for multiplication and long division questions.

29	$\begin{array}{r} 5413 \\ \times \quad 86 \\ \hline \end{array}$	<div>Show your method</div>	36	$97 \overline{)8827}$	<div>Show your method</div>	<div></div>	<div>2 marks</div>
	<div></div>		<div>2 marks</div>	<div></div> <div>2 marks</div>			

Paper 1 - Arithmetic

How can you help your child?

In Numeracy, is it a particular area of the subject that they haven't got the hang of yet? Do they know their times tables well enough? Are they weaker at subtraction than addition? There are lots of ways you can help boost their maths skills so they feel confident and ready to sit Paper 1. Establish the area they need to work on and work around this as much as possible.

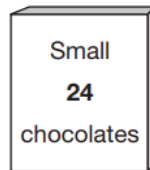
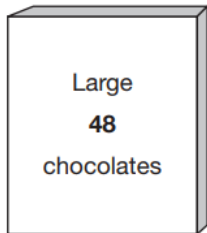
Paper 2/3 - Reasoning

- Paper 2 – reasoning (40 minutes)
- Paper 3 – reasoning (40 minutes)

Both of these reasoning papers consist of around 20 problem-solving questions, in which children must show solid mathematical knowledge by solving various problems and puzzles.

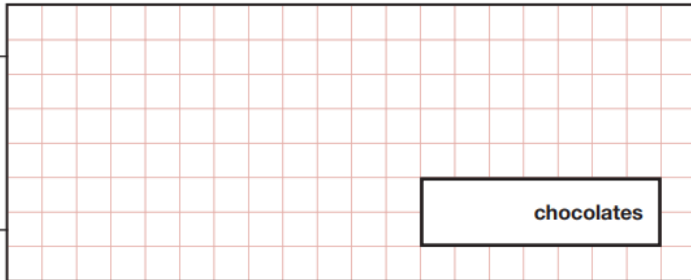
Maths Reasoning

- 8** Ken buys 3 large boxes and 2 small boxes of chocolates.
Each large box has 48 chocolates. Each small box has 24 chocolates.



How many **chocolates** did Ken buy altogether?

Show
your
method



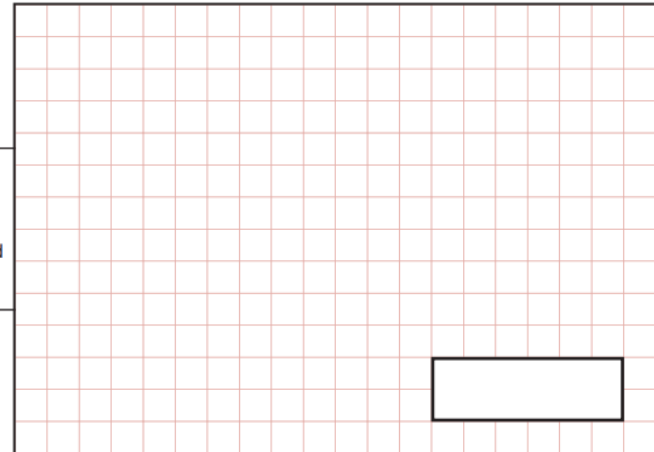
2 marks

- 17** There are 28 pupils in a class.
The teacher has 8 litres of orange juice.
She pours 225 millilitres of orange juice for every pupil.



How much orange juice is left over?

Show
your
method



3 marks

Children are expected to present their working out in the spaces provided for questions like these. Some questions are out of 2 marks whilst others are out of 3 marks. Please encourage your child to show their working out as if they get the wrong answer, they have a chance of being awarded at least 1 mark based on their working out.

Maths Reasoning

10

A theme park sells tickets online.

Each ticket costs £24

There is a £3 charge for buying tickets.

Which of these shows how to calculate the total cost, in pounds?

Tick **one**.

number of tickets $\times 3 + 24$ ☐

number of tickets $\times 24 + 3$ ☐

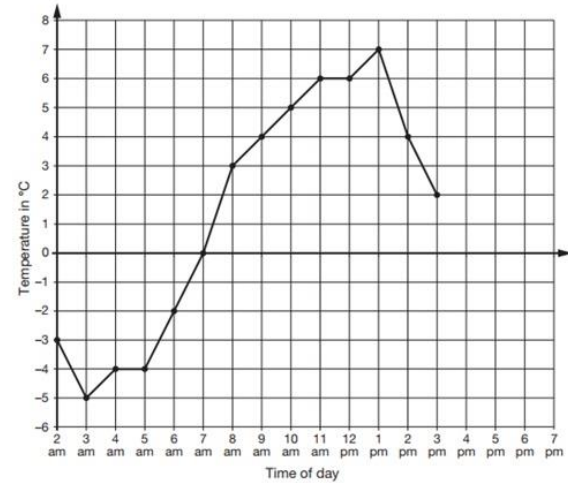
number of tickets $+ 3 \times 24$ ☐

number of tickets $+ 24 \times 3$ ☐

1 mark

4

This graph shows the temperature in $^{\circ}\text{C}$ from 2 am to 3 pm on a cold day.



How many degrees **warmer** was it at 3 pm than at 3 am?

$^{\circ}\text{C}$

1 mark

At 6 pm the temperature was 4 degrees lower than at 3 pm.

What was the temperature at 6 pm?

$^{\circ}\text{C}$

1 mark

Usually, paper 2 is a lot more easier than Paper 3. Some questions are more simple and require children to tick from a list of options whilst others will require them to just write a simple answer.

Maths Reasoning

Topics that will come up?

Children will be tested on everything they have touched on during Key Stage 2. These could be:

- **Statistics**
- **Geometry – position and direction**
- **Algebra**
- **Measurement**
- **Ratio and proportion**
- **Number – fractions, decimals and percentages**
- **Number – addition, subtraction, multiplication and division**
- **Number and place value**

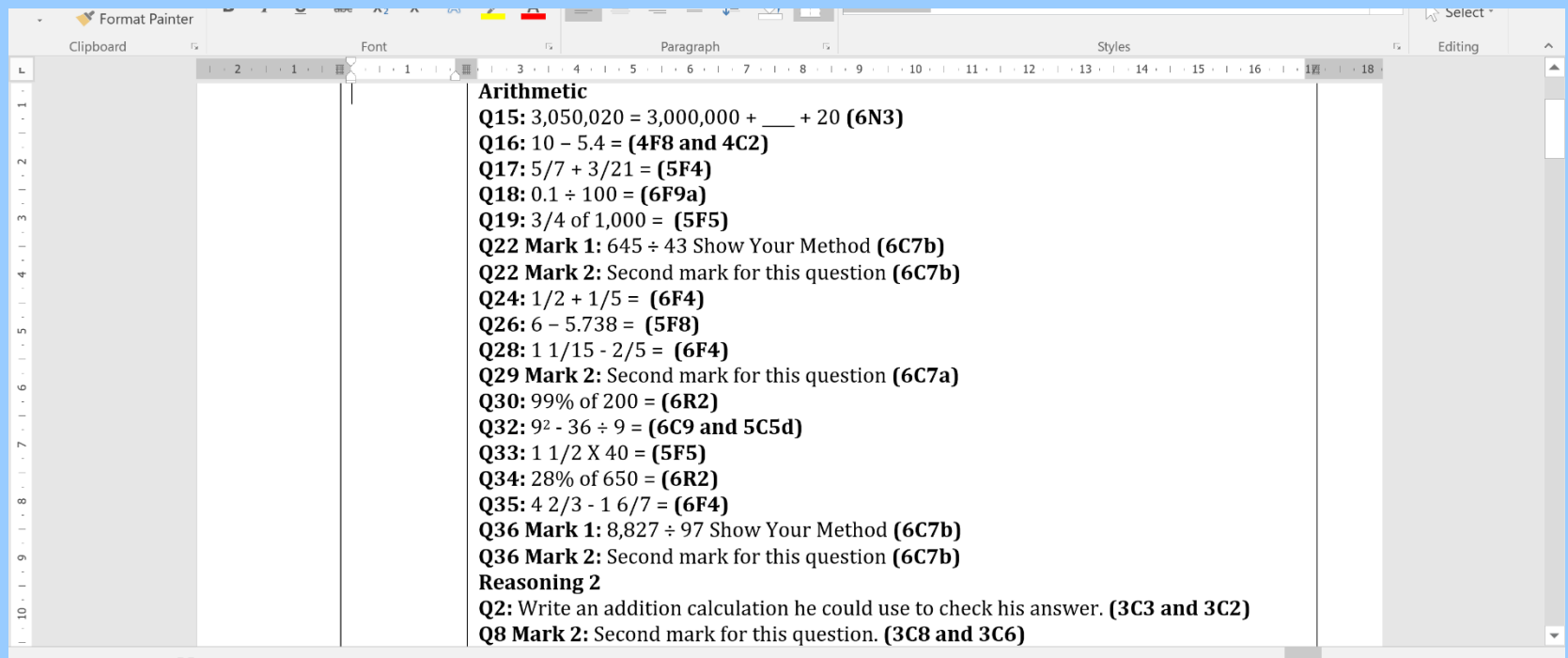
Maths Reasoning

- Please support your child in completing their homework, let us know if there was an area that your child found difficult.
- Please make sure that your child knows their times tables and key maths facts.

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

Maths Reasoning

- Please support your child in completing their homework, let us know if there was an area that your child found difficult.



The screenshot shows a Microsoft Word document with a list of arithmetic and reasoning questions. The questions are numbered and include their answers in parentheses. The document is displayed in a window with the ribbon visible at the top.

Arithmetic

Q15: $3,050,020 = 3,000,000 + ___ + 20$ (6N3)
Q16: $10 - 5.4 =$ (4F8 and 4C2)
Q17: $5/7 + 3/21 =$ (5F4)
Q18: $0.1 \div 100 =$ (6F9a)
Q19: $3/4$ of 1,000 = (5F5)
Q22 Mark 1: $645 \div 43$ Show Your Method (6C7b)
Q22 Mark 2: Second mark for this question (6C7b)
Q24: $1/2 + 1/5 =$ (6F4)
Q26: $6 - 5.738 =$ (5F8)
Q28: $1 \frac{1}{15} - 2/5 =$ (6F4)
Q29 Mark 2: Second mark for this question (6C7a)
Q30: 99% of 200 = (6R2)
Q32: $9^2 - 36 \div 9 =$ (6C9 and 5C5d)
Q33: $1 \frac{1}{2} \times 40 =$ (5F5)
Q34: 28% of 650 = (6R2)
Q35: $4 \frac{2}{3} - 1 \frac{6}{7} =$ (6F4)
Q36 Mark 1: $8,827 \div 97$ Show Your Method (6C7b)
Q36 Mark 2: Second mark for this question (6C7b)

Reasoning 2

Q2: Write an addition calculation he could use to check his answer. (3C3 and 3C2)
Q8 Mark 2: Second mark for this question. (3C8 and 3C6)

Any questions?

