



For parents to understand what is expected in the KS2 SATS Arithmetic paper and have knowledge of the methods taught in school

In the maths SATS papers...

ARITHMETIC is key!!

Paper 1 Arithmetic is out of 40 marks

Paper 2 Reasoning is out of 35 marks

Paper 3 Reasoning is out of 35 marks

What are the basic skills children need to know for the Year 6 SATs?

There are some skills that prove invaluable for the Year 6 SATs, but they often get neglected – such as number bonds, times tables and finding fractions or percentages of amounts. It is important that your child is secure with these skills.

Arithmetic Paper

This paper tests how well children can work out calculations with no context. You'll only see a calculation and an answer box for each question, as well as a small area to show your workings. This test is quite short – only 30 minutes. That's why it's important to practise mental maths all year round.

How can I help my child with KS2 maths?

Basic skills

Recap

Encourage neat number formation

1	$39 + 673 =$	Place value is key with this question type	<input type="checkbox"/> 1 mark
	$\begin{array}{r} 673 \\ + 39 \\ \hline 712 \end{array}$	712	

4	$838 \div 1 =$	

838

1 mark

5	$99 \div 11 =$	

9

1 mark

6 $5 \times 4 \times 10 =$

$20 \times 10 = 200$

200

1 mark

7 $7,064 - 502 =$

$\begin{array}{r} 67,064 \\ - \quad 502 \\ \hline 6562 \end{array}$

6562

1 mark

8 $6^2 + 10 =$

$6^2 = 6 \times 6 = 36$

$36 + 10 = 46$

46

1 mark

9 $56.38 + 24.7 =$

align the decimals

↓

$$\begin{array}{r} 56.38 \\ 24.70 \\ \hline 81.08 \end{array}$$

Place holder ←

81.08

1 mark

12 $5,400 \div 9 =$

$54 \div 9 = 6$

$540 \div 9 = 60$

$5400 \div 9 = 600$

600

1 mark

13 $60 \div 15 = 60$ How could doubling help me?

$2 \times 15 = 30$

$4 \times 15 = 60$

60

1 mark

10 308 $- 10 = 298$ $+ 10$

inverse

$298 + 10 = 308$

1 mark

11 $270 \div 3 =$ what number skills can help us?

$27 \div 3 = 9$

$270 \div 3 = 90$

1 mark

14	<input type="text"/> = 5,776 - 855	<input type="text"/>
	$\begin{array}{r} 4 \cancel{8} \overline{) 776} \\ - \quad 855 \\ \hline 4921 \end{array}$	

15	$3,050,020 = 3,000,000 + \boxed{50,000} + 20$	<input type="text"/>
	Understanding place value is key to this question type.	

16 $10 - 5.4 =$

Place holders

$$\begin{array}{r} 10.00 \\ - 5.40 \\ \hline 4.60 \end{array}$$

4.6

1 mark

$\frac{5}{7}$ → numerator
 → denominator

17 $\frac{5}{7} + \frac{3}{21} =$

1. same denominator
 (lowest common multiple)
2. Add fractions (only the
 numerator)

$$\frac{5}{7} + \frac{3}{21} = \frac{15}{21} + \frac{3}{21} = \frac{18}{21}$$

$\frac{18}{21} = \frac{6}{7}$

1 mark

18 $0.1 \div 100 =$

0	.	1			
0	.	0	0	1	

0.001

1 mark

19 $\frac{3}{4}$ of 1,000 = 750

250	250	250	250	$\frac{1}{4}$
1000				← whole

$\frac{1}{4} = 250$

750

1 mark

24 $\frac{1}{2} + \frac{1}{5} =$

$$\frac{1}{2} + \frac{1}{5} = \frac{5}{10} + \frac{2}{10} = \frac{7}{10}$$

$\xrightarrow{\times 5}$ $\xrightarrow{\times 2}$

$\frac{7}{10}$

1 mark

25 $1\frac{3}{4} + \frac{3}{4} =$

1	$\frac{3}{4}$
+	$\frac{3}{4}$
1	$\frac{6}{4}$

Step 1

Step 2 $\frac{6}{4} = 1\frac{2}{4}$

Step 3 $1\frac{2}{4} + 1$

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

1 mark

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

26

$$6 - 5.738 =$$

$$\begin{array}{r} 5 \cancel{6} \overset{9}{0} \overset{9}{0} \overset{1}{0} \\ \underline{5.738} \\ 0.262 \end{array}$$

0.262



1 mark

27

$$3.9 \times 30 =$$

$$\overset{\times 10 \downarrow}{\underline{\quad}} 39 \times 30 =$$

$$\begin{array}{r} 39 \\ \times 3 \\ \hline 117 \\ 2 \end{array}$$

$$39 \times 3 = 117$$

$$39 \times 30 = 1170$$

$$\downarrow \div 10$$

117

117



1 mark

28	$1\frac{1}{15} - \frac{2}{5} =$ <div style="text-align: center;"> </div>	<input type="checkbox"/> 1 mark
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29	$\begin{array}{r} 5413 \\ \times 86 \\ \hline 32478 \\ 433040 \\ \hline 465518 \end{array}$ <div style="margin-left: 20px;"> (5413×60) (5413×80) </div>	<input type="checkbox"/> 2 marks
Show your method	<div style="border: 1px solid black; display: inline-block; padding: 5px; margin-right: 20px;">465,518</div>	

30 99% of 200 =

100%
↓
1% of 200 = 2
100% - 1% = 99%
↓
200 - 2 = 198

1 mark

31 $\frac{1}{4} \div \frac{2}{1} =$

- keep
- change
- flip

$\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$

1 mark

32	$9^2 - 36 \div 9 =$	BIDMAS	<input type="checkbox"/> 1 mark
	$81 - 36 \div 9 =$		
	$81 - 4 = 77$		
		<input type="text" value="77"/>	

This is a relatively simple question - the 2024 paper gave the answer as a decimal!

33	$1\frac{1}{2} \times 40 =$		<input type="checkbox"/> 1 mark
	$1 \times 40 = 40$		
	$\frac{1}{2} \text{ of } 40 = 20$		
	$40 + 20 =$		
		<input type="text" value="60"/>	

34 28% of 650 =

$650 \div 10 \leftarrow$ to find 10%
 $10\% = 65$ divide by 10

$10\% = 65 \xrightarrow{\times 2}$	$20\% = 130$
$5\% = 32.5$	$5\% = 32.5$
$1\% = 6.5$	$3\% = 19.5$
$2\% = 13$	182.0
$3\% = 19.5$	182

1 mark

35 $4\frac{2}{3} - 1\frac{6}{7} =$

$3\frac{4}{3}$	$\frac{2}{3} \xrightarrow{\times 7} \frac{14}{21}$	$\frac{21}{21} = \frac{35}{21}$
1	$\frac{6}{7} \xrightarrow{\times 3} \frac{18}{21}$	$\frac{18}{21}$
2	$\frac{17}{21}$	$2\frac{17}{21}$

1 mark

