

HELP YOUR CHILD WITH MATHS!  
FAMILY LEARNING

SATs 2026

- A child awarded a **scaled score of 100** is judged to have met the 'national standard'
- A child awarded a scaled score of **more than 110** is judged to have **exceeded** the national standard and demonstrated a higher than expected knowledge  
**Secondary Schools receive the Raw scores directly from the DFE**

Mathematics paper 1- Arithmetic (40 Marks) - 30 min  
Mathematics paper 2- Reasoning (35 Marks) - 40 min  
Mathematics paper 3- Reasoning (35 Marks) - 40 min

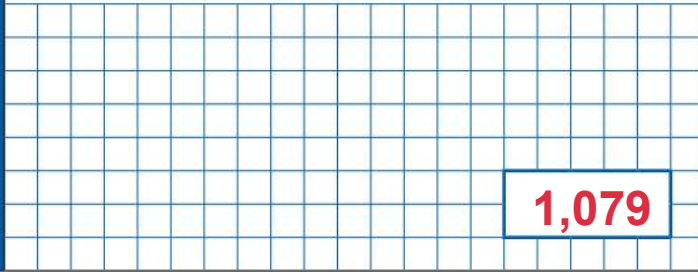
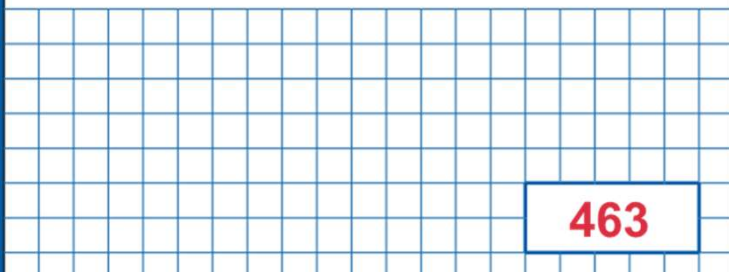
# Arithmetic Paper

Maths Paper 1 (Arithmetic) will take place on .

It has a standard timing of **30 minutes** and is worth a total of **40 marks**.

It covers the **four operations** (division, multiplication, addition, subtraction and mixed operation calculations requiring **BIDMAS**), as well as **number properties**, calculating **percentages of amounts**, calculations using **decimals**, and calculations using **fractions**.

Example question:

<b>1</b>	$979 + 100 =$		<b>7</b>	$472 - 9 =$	
					
<b>1,079</b>		<input type="checkbox"/>	<b>463</b>		<input type="checkbox"/>
		1 mark			1 mark



In this test, long division and long multiplication questions are worth 2 marks each.

Children will be awarded 2 marks for a correct answer. They may get 1 mark for showing a formal method.

All other questions are worth 1 mark each.

25											1 - 13
Show your method	1	3	3	0	1	6					3 - 39
											4 - 52
											5 - 65
											6 - 78
											7 - 91
											8 - 104
											9 - 117
											10 - 130

232

2 marks

Children will be awarded 2 marks for a correct answer. They may get 1 mark for showing a formal method.

**23**

Award **TWO** marks for the correct answer of 22,572

If the answer is incorrect, award **ONE** mark for a formal method of long multiplication with no more than **ONE** arithmetic error, e.g.

$$\begin{array}{r} \bullet \\ \times \quad 836 \\ \quad \underline{27} \\ \quad 5852 \\ \quad \underline{16720} \\ 22602 \text{ (error)} \end{array}$$

**OR**

$$\begin{array}{r} \bullet \\ \times \quad 836 \\ \quad \underline{27} \\ \quad 5612 \text{ (error)} \\ \quad \underline{16720} \\ 22332 \end{array}$$

# Reasoning Paper

The reasoning papers will take place on Wednesday 14<sup>th</sup> and Thursday 15<sup>th</sup> May

Papers 2 and 3 require children to demonstrate their mathematical knowledge and skills, as well as their ability to solve problems and their mathematical reasoning.

Questions focus on the following Mathematical topic areas:

- Number and place value— including Roman Numerals;
- Addition, subtraction, multiplication and division (calculations);
- Geometry – properties of shapes;
- Geometry – position and direction;
- Statistics;
- Measurement – including length, perimeter, mass (weight), volume, time and money;
- Algebra;
- Ratio and proportion;
- Fractions, decimals and percentages.

The questions generally become more challenging throughout the paper.

# Reasoning Paper

- 1) What do you know? (The information have you been given)
- 2) What do you want to know? (What is the question asking you to find?)
- 3) What skill(s) do you need to use? (Which operations?)

2

A pack of paper has 150 sheets.

[2016S]

4 children each take 7 sheets.

How many sheets of paper are left in the packet?

Show your method



# Reasoning Calculations

## Maths Paper 2 (Reasoning)

Example questions:

6

Stefan's watch shows five minutes past nine.

The watch is twelve minutes fast.



What is the correct time?

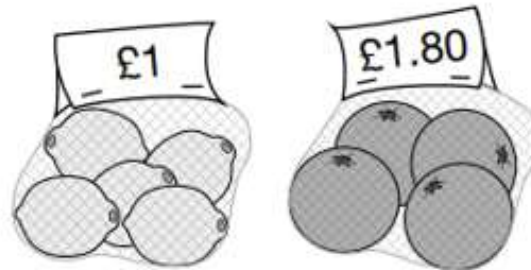
1 mark

# Maths Paper 3 (Reasoning)

10

A bag of 5 lemons costs £1

A bag of 4 oranges costs £1.80



How much **more** does one orange cost than one lemon?

Show  
your  
method

$$100 \div 5 = 20 \text{ p}$$

$$180 \div 4 = 45 \text{ p}$$

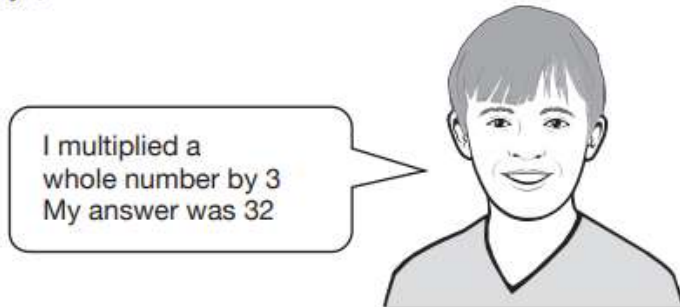
$$45 \text{ p} - 20 \text{ p} = 25 \text{ p}$$

$$25 \text{ p} / \text{£}0.25$$

2 marks

# Reasoning Calculations

Jack says,



Explain why Jack is **not** correct.

**Do not** accept responses that restate the question, e.g. Jack is not correct because if you multiply 3 by any whole number you will not get 32.

**Do not** accept vague or incomplete explanations, e.g.

- If you multiply by 3 you will get 30, not 32
- 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33
- 32 is not a factor of 3

**Do not** accept explanations which include incorrect mathematics or incorrect information relevant to the explanation.

Award **ONE** mark for an explanation that recognises that 32 is not a multiple of 3, e.g.

- 32 is not in the 3x table
- $32 \div 3 = 10 \text{ r}2$  or 10.66 (which are not whole numbers)
- if you count in multiples of 3 from 0, you won't get 32
- $3 + 2 = 5$ , 5 is not a multiple of 3 so he is wrong.

**OR**

For a description that includes one or both of the multiples of 3 either side of 32, e.g.

- if you do  $10 \times 3 = 30$  and  $11 \times 3 = 33$  there is no 32
- $10 \times 3 = 30$  and 32 is 2 away.

# Fractions

4

Neil has 40 animals on his farm.

$\frac{7}{10}$  of the animals are sheep.

How many sheep are there on the farm?

Finding a fraction of an amount.

14

Draw lines between the two pairs of fractions that add up to 5.

$$2\frac{3}{7}$$

$$\frac{6}{7}$$

$$3\frac{4}{7}$$

$$\frac{8}{7}$$

$$1\frac{1}{7}$$

$$\frac{18}{7}$$

$$1\frac{5}{7}$$

$$\frac{23}{7}$$

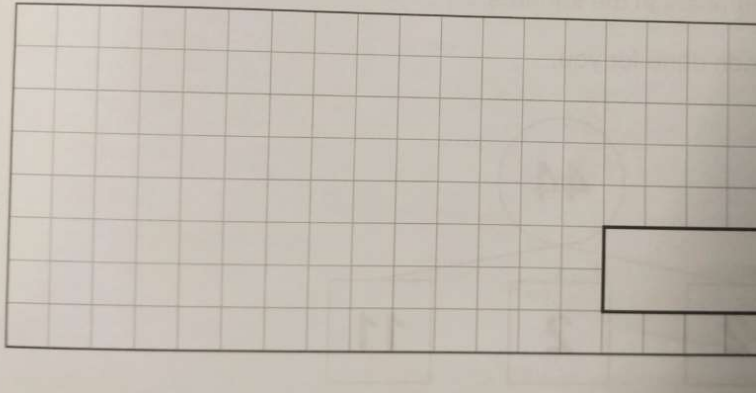
- Improper fractions
- Mixed numbers
- Adding fractions

# Measurement

- 6 Katie has 8 identical cups.  
She pours 218 ml of water into each cup.

How much water does she use in **litres**?

Show  
your  
working

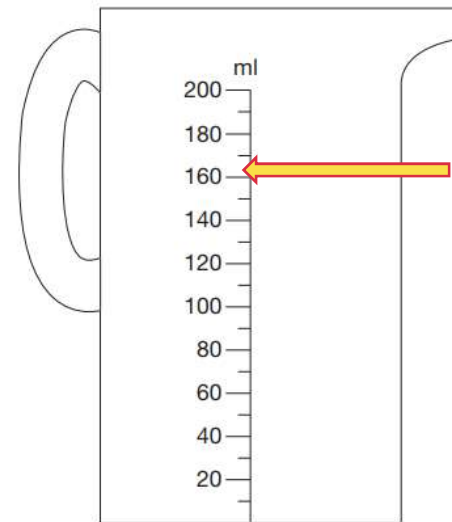


Conversions  
with  
multiplication

5

Chen pours 165 millilitres of milk into a measuring jug.

Draw an arrow on the jug to show the level of the milk.



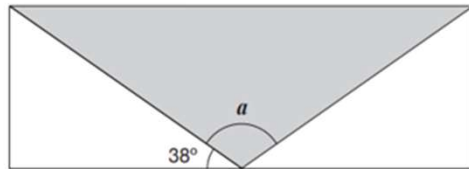
1 mark

Measurement

# Geometry

15

A shaded **isosceles** triangle is drawn inside a rectangle.



Not to scale

Calculate the size of angle  $a$ .

Show your method

$$38 \times 2 = 76$$

$$180 - 76 = 104$$

$$a \text{ is } 104^\circ$$

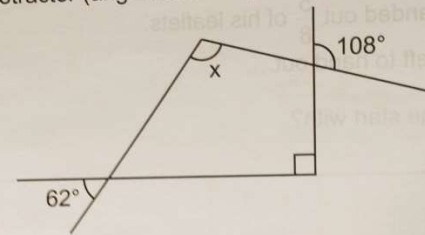
2 marks

19

Find the size of angle  $x$  in the shape below.

Do not use a protractor (angle measurer).

Not drawn accurately



Show your working

Types of triangles and their properties.  
Angles

Angles on a straight line and angles at a point.

# Statistics

12 Put each number in the correct place on the diagram below.

Factors and  
multiples with  
statistics

2

6

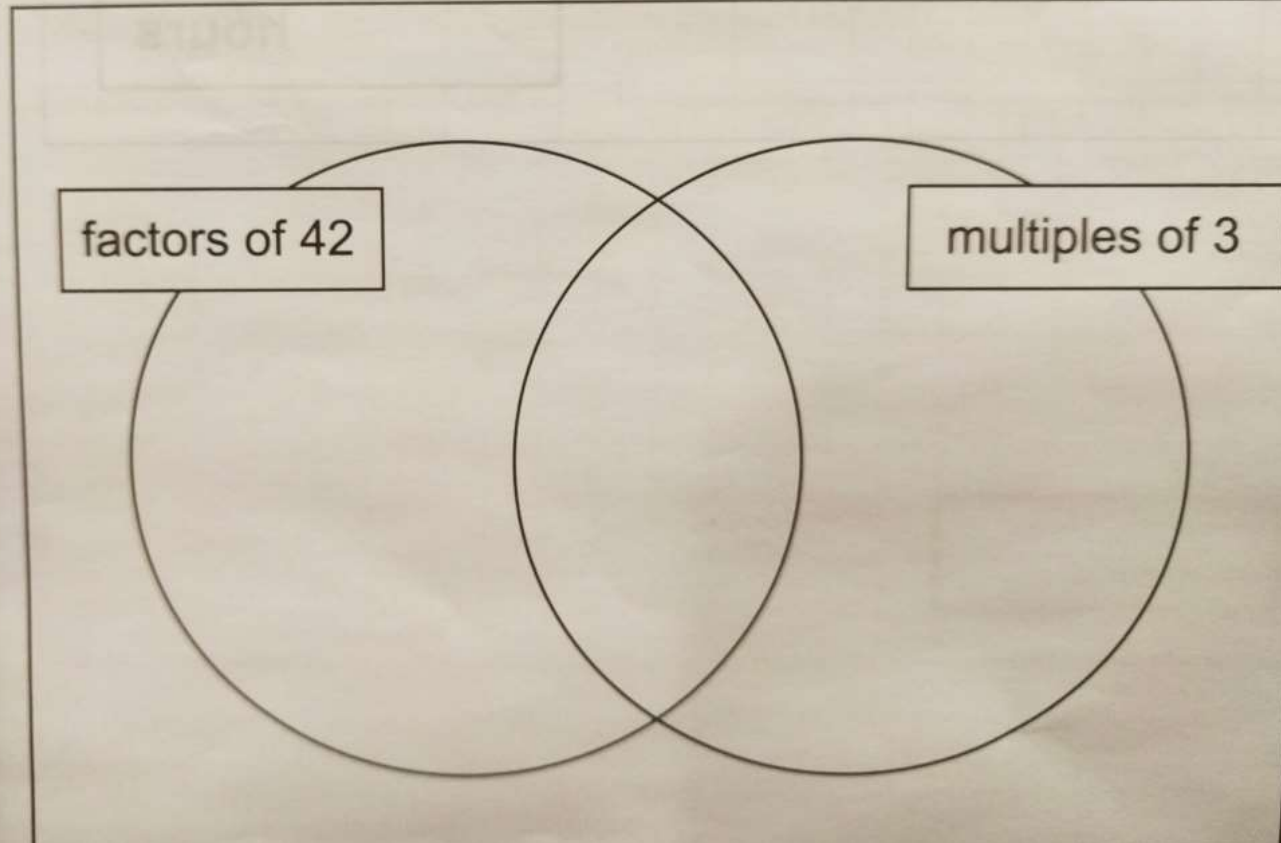
7

9

21

factors of 42

multiples of 3



# How to help at home

Firstly, a positive attitude goes a long way – so as much encouragement and support as possible (but we don't need to tell you that)!

Try to provide a quiet corner of the house for homework and study, that's as free from distractions as possible;

Create a revision timetable that works for you and your child – for some children and families, a couple of 10 – 20 minute activities a day works best; for others, a longer study session on a Saturday or Sunday might be better.

Keep it light – practice key skills like times tables and practice mental maths in real world scenarios, like adding up prices in the shops, working out discount deals, and asking questions like, *"If there are 1,300 grams of flour in this pack, what is that in kilograms?"*

Any concerns please speak to me, we are here to help!

Ensure your child is eating and drinking well, and getting a suitable amount of sleep.

# Advice for Year 6 children!

- Read the questions carefully. This can help to avoid any silly mistakes!
- Don't worry if there's something you can't answer. Take a deep breath! You can always move on and go back later but it's better to write something rather than nothing;
- Make sure you get plenty of sleep and stay well fed – sleep and food help keep the brain moving;
- Keep in mind year 6 SATs are just one week of your entire life!

“Stay focused in class so you don't have loads of extra study at home!”  
– Year 7 pupil's advice