

Core Examinations Event



Timings:

- **Sessions 1 and 2 (English and Maths)** will take place in this room until approx. 7pm.
- **Session 3 (Science)** will take place in the main hall until approx. 7:30pm.

Aims of the evening:

- To provide you and your child with **specific** revision strategies for core subjects to be used in the upcoming mock examinations, and in the final approach to the GCSEs.
- To offer practical advice to parents for helping your child to complete effective revision.



Maths Foundation Tier Revision

Exam dates...

Paper 1 : Thursday 14th May 2026

Paper 2 : Wednesday 3rd June 2026

Paper 3 : Wednesday 10th June 2026

Year 11 Examinations Night

FRED LONGWORTH
HIGH SCHOOL



Maths Foundation Mock Revision List

Foundation P1	MW Clip	Foundation P2	MW Clip
Angle facts	9/45/121	Angles in a quadrilateral	123
Area of shapes	53/54	Averages from grouped frequency	130a/b
Bar charts	15	Constructions	145a/b/c
Best buy	41	Conversion graphs	107
BIDMAS	75	Conversions	112
Equation of straight lines	159a	Co-ordinates	8
Estimation	91	Form expressions	137
FDP	85	Fractions and percentages of amounts	72/86
Fraction calculations	71/73/74	LCM	78/80
Function machines	36	Listing outcomes	58/59
Indices and roots	29	Measuring	46a
Money	22a	Money	22b
Multiplication	19	Multiples	28
Negatives	23/68a/68b	Order integers	2
nth term	102/103	Pictogram	16
Order decimals	3	Prime factors	78
Percentages, ratios and fractions of amounts	106/87/72/106/165a	Probability	59
Reverse percentages	110	Pythagoras	150a
Rounding	31/32/90	Quadratic graph	98/160
Simplifying ratio	38	Ratio sharing	106
Solve equations	135a	Similar shapes	144
Solve inequalities	139	Simple interest	111
Stem and Leaf	128b	Speed	142a
Transformations	48/49/50/148	Substitution	95
Venn diagrams	127a	Using a calculator	77

Year 11 Examinations Night

Let's pick a topic: **RATIO**

But how
do I
revise
ratio???





What do you know already?

Paul and Sue completed a project together and are paid for it in the ratio 3 : 5.
Sue is paid £2400.
How much is Paul paid?

Paul and Sue completed a project together and are paid for it in the ratio 3 : 5.
Sue is paid £2400 more than Paul.
How much is Paul paid?

£2400 3 : 5

Paul and Sue completed a project together and are paid for it in the ratio 3 : 5.
In total, they are paid £2400.
How much is Paul paid?

Paul and Sue completed a project together and are paid for it in the ratio 3 : 5.
In total, they are paid £2400.
What fraction of the money is Paul paid?



What do you know already?

Paul and Sue completed a project together and are paid for it in the ratio 3 : 5.
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How much is Paul paid?

P

S

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P

S

£2400

3 : 5

P

S

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In total, they are paid £2400.
What fraction of the money is Paul paid?

What can you do to help?

- Remember there are so many maths resources already done and videos to watch. (We will go through)
- Encourage your child to use the topic list and focus on topics they find **DIFFICULT**.
- Use resources with answers so you can **check** together.

Ratio Revision...

Mathsgenie : Ratio search...

Generates 16 different questions, all
GCSE style instantly.

All **answers** to the questions with
working out to check!

Grade 3

Videos	Exam Questions	Exam Questions Booklet	Solutions
Writing and Simplifying Ratio	Exam Questions	Writing and Simplifying Ratio	Solutions
Ratio	Exam Questions	Sharing Ratio	Solutions

Grade 5

Videos	Exam Questions	Exam Questions Booklet	Solutions
Writing a Ratio as a Fraction or Linear Function	Exam Questions	Ratio Fraction Problems	Solutions
	Exam Questions	Ratio Problems 2	Solutions

Ratio Revision...

Corbettmaths : Ratio search...

Practice questions are exam style and textbook exercises are several different questions with problem solving in most cases.

Each video shows examples and questions

All different ratio topics...

Ratio: simplifying

[Video 269](#)

[Practice Questions](#)

[Textbook Exercise](#)

Ratio: express as fractions or %

[Video 269a](#)

[Practice Questions](#)

[Textbook Exercise](#)

[Exercise](#)

Ratio: sharing the total

[Video 270](#)

[Practice Questions](#)

[Textbook Exercise](#)

Ratio: given one value

[Video 271](#)

[Practice Questions](#)

[Textbook Exercise](#)

Ratio: given two **ratios**

[Video 271a](#)

[Textbook Exercise](#)

Ratio: difference between

[Video 271b](#)

[Textbook Exercise](#)

Ratio: expressing as 1:n

[Video 271c](#)

[Textbook Exercise](#)

Ratio: equations/**ratios**

[Video 271d](#)

Ratio: solving problems 1

[Video 271e](#)

[Textbook Exercise](#)

Ratio Revision...

mathswatch :
Ratio search...

Find a Clip

Qualification

Tier

Grade

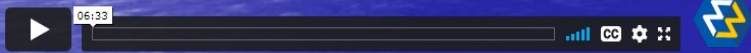
Topic

Search

Video for
each

Clip 38

INTRODUCTION TO RATIO



Choose Clip (11)

11 different
clips match.

Clip	Title
21	Inverse Operations
38	Introduction to Ratio
39	Using Ratio for Recipe Questions
58	Listing Outcomes
69	Listing Strategies
75	BODMAS/BIDMAS
106	Sharing using Ratio
107	Ratios, Fractions and Graphs
165a	Ratio Questions - Standard Questions

Standard Questions

1

2

3

4

5

Harder Questions

Question Progress

a) Write the ratio

24 : 18

in its simplest form.

b) 150 people attend a play.
45 of them are male.

Write the ratio male : female in its simplest form.

Interactive
questions to try

Ratio 2

Ratio is used in lots of problem-solving questions. You need to be able to answer ratio questions like the ones on this page **without using a calculator**. Remember that you won't have one for Paper 1.

Golden rule

You can answer lots of ratio questions by working out what **one part** of the ratio represents.

Worked example

Target grade 3

Alexis, Nisha and Paul share a flat. One month their phone bill is £120. They decide to split the bill in the ratio 3 : 5 : 2. How much does each person pay? (3 marks)

$$3 + 5 + 2 = 10$$

$$120 \div 10 = 12$$

$$3 \times 12 = 36. \text{ Alexis pays } \pounds 36.$$

$$5 \times 12 = 60. \text{ Nisha pays } \pounds 60.$$

$$2 \times 12 = 24. \text{ Paul pays } \pounds 24.$$

To divide a quantity in a given ratio:

1. Work out the total number of parts in the ratio.
2. Divide the quantity by this total.
3. Multiply your answer by each part of the ratio.

The order the people are written in is the same as the order of the numbers in the ratio. Alexis is first in the list, so 3 parts of the ratio represent the amount she pays.

Check it!

$$\pounds 36 + \pounds 60 + \pounds 24 = \pounds 120 \checkmark$$

Worked example

Target grade 4

Jamie and Chaaya took part in a sponsored swim to raise money for charity. The ratio of Jamie's total to Chaaya's total is 5 : 7. Chaaya raised £12 more than Jamie. How much money did they raise in total? (3 marks)

$$7 - 5 = 2$$

$$2 \text{ parts} = \pounds 12 \text{ so } 1 \text{ part} = \pounds 6$$

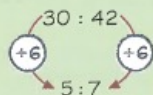
$$\text{Jamie} = \pounds 30$$

$$\text{Chaaya} = \pounds 42$$

$$\text{Total} = \pounds 30 + \pounds 42 = \pounds 72$$



Start by working out what one part of the ratio represents. Chaaya raised £12 more than Jamie so **two parts** of the ratio represent £12. Therefore, **one part** of the ratio represents £6. So Jamie raised $5 \times \pounds 6 = \pounds 30$. Chaaya raised $7 \times \pounds 6 = \pounds 42$. Check it!



$$\pounds 42 - \pounds 30 = \pounds 12 \checkmark$$

Now try this

Target grade 4

- 1 Ruth, Sue and Tess share £400 between them. Ruth receives £80 more than Sue. The ratio of Ruth's share to Sue's share is 9 : 5. Work out how much Tess receives. (3 marks)

- 2 Terri mixed 300 g of rice with 240 g of fish. She added some onion to the mixture. The ratio of the weight of fish to the weight of onion was 3 : 2. Work out the ratio of the weight of rice to the weight of onion. (3 marks)



Ratio 2

Target grade 3

- 6 Solder is made from lead and tin. The ratio of the mass of lead to the mass of tin is 2 : 3

Guided

- (a) Kyle made 70 g of solder. Work out the mass of the lead used.

$$\text{Total parts} = \dots + \dots = \dots$$

$$1 \text{ part} = 70 \div \dots = \dots \text{ g}$$

$$2 \text{ parts} = 2 \times \dots = \dots \text{ g}$$

(2 marks)

- (b) He then uses 16 g of lead to make some more solder. Work out the mass of solder he made.

..... g (2 marks)

Target grade 4

- 7 Gabby and Harry shared some money based on their ages. The ratio of Gabby's age to Harry's age is 3 : 8. Harry received £2000 more than Gabby. How much money did they share?

$$8 - 3 = 5 \text{ parts}$$

$$5 \text{ parts} = \pounds 2000$$

$$1 \text{ part} = \pounds 2000 \div 5 = \dots$$

$$11 \text{ parts} = 11 \times \dots = \dots$$

$$\text{In total they shared } \pounds \dots$$

(3 marks)

Target grade 4

- 8 Asha uses an old recipe to make some cakes. The ratio of the weights of flour, margarine and sugar needed for the recipe is 5 : 4 : 3. Asha has the following amounts of each ingredient.

1825 g of flour
700 g of margarine
250 g of sugar

Each cake needs 48 g of the combined ingredients. Show that the maximum number of cakes she can make is 20.

(3 marks)

Revision cards...

- Remember that **DOING** maths is better than **READING** maths.
- Encourage your child to actually sit and answer questions and **check** them.
- Make some **revision cards**, with a skill/formula on one side, and an example question on the other.
- Tick off once a skill is mastered and know what isn't yet fully understood!

Writing a simplifying ratio

- Always label which parts represent what. The order they are mentioned in the question is the order they are in.

eg, Luke & Jordan share pizza in the ratio 2:3. What fraction did Jordan eat?

eg2 $\frac{5}{8}$ of children are girls. Write the ratio of boys to girls

- When simplifying check units are the same. Simplified ratios shouldn't have decimals in.

eg3 Simplify 40cm:2m eg4 Simplify £1.40:£3

- 1:n means make the first part 1, n:1 means make the second part 1.

egs Write 5:4 in a) 1:n form b) n:1 form

$$\begin{array}{c} \text{L} \quad \text{J} \\ \text{eg1 } 2:3 \\ \quad \quad \nearrow \\ \quad \frac{3}{5} \\ \hline \hline \end{array}$$

$$\begin{array}{c} \text{eg2 Boys : Girls} \\ \quad \frac{3}{8} \quad \frac{5}{8} \\ \text{so } \underline{\underline{3:5}} \end{array}$$

$$\begin{array}{c} \text{eg3. } 40\text{cm}:2\text{m} \\ \quad 40:200 \\ \div 40 \swarrow \\ \quad \underline{\underline{1:5}} \end{array}$$

$$\begin{array}{c} \text{eg4. } £1.40:£3 \\ \quad 140:300 \\ \div 10 \swarrow \\ \quad 14:30 \\ \div 2 \swarrow \\ \quad \underline{\underline{7:15}} \end{array}$$

$$\begin{array}{c} \text{egs. a) } 5:4 \\ \div 5 \swarrow \quad \downarrow \div 5 \\ \quad \underline{\underline{1:0.8}} \end{array}$$

$$\begin{array}{c} \text{b) } 5:4 \\ \div 4 \swarrow \quad \downarrow \div 4 \\ \quad \underline{\underline{1.25:1}} \end{array}$$

Combining ratios.

You can combine two ratios into one by finding a common multiple.

eg, In a house the ratio of dogs to fish is 1:10. The ratio of fish to cats is 6:1. What is the ratio of dogs to cats?

Map scales

Remember the map is the smaller part.
Work out the conversion rates like an exchange rate.

eg2 A map has a scale of 1:50000.
What is the map distance if two towns are 32km in real life?

$$1 \text{ km} = 1000 \text{ m}$$

$$1 \text{ m} = 100 \text{ cm}$$

$$1 \text{ cm} = 10 \text{ mm}$$

$$\begin{array}{ccc} \text{eg}_1 & D:F & F:C \\ & 1:10 & 6:1 \\ & \swarrow \times 3 & \searrow \times 5 \\ & D & F & C \\ & 3:30:5 & \rightarrow & D:C \\ & & & \underline{\underline{3:5}} \end{array}$$

$$\begin{array}{l} \text{eg}_2 \\ \begin{array}{ccc} & \xrightarrow{\times 50000} & \\ \text{map} & & \text{real life} \\ & 1:50000 & \\ & \xleftarrow{\div 50000} & \end{array} \end{array}$$
$$\begin{array}{l} 32 \text{ km} \downarrow \times 1000 \\ 32000 \text{ m} \downarrow \times 100 \\ 3200000 \text{ cm} \end{array}$$
$$3200000 \div 50000 = \underline{\underline{64 \text{ cm}}}$$



Revision sessions...

Wednesday after school, 3pm.

Mrs Heywood – Gen 1

Mrs Roylance – M7

Mrs Hilton/Mrs Evans – M2

Mr McKeown – M3

Other things to note...

Mrs Roylance has emailed about our concerns regarding inappropriate use of AI.

If your child misses a maths lesson, it is their responsibility to catch up on missed work, as we don't have time to reteach content.

To summarise...

- **Mathswatch** – the videos are great for learning the skills and the interactive questions provide you with instant feedback.
- **Corbett Maths** – another way to watch videos and practice what you have learnt. All questions have answers attached.
- **Mathsgenie** – great for exam style questions. All exam questions have worked solutions.
- **Self Directed Study Hub** – on the school website. Adding videos to support with homework/revision, past papers available, revision list.