

How can I support my child with their Maths revision?

- **What are we aiming at?**
- **How should revision be structured?**
- **What should be revised?**
- **Where can I find resources/questions/answers?**

Foundation – grade boundaries

| Exam | | | | | Grade | | | | | | | | | |
|----------|----------|------|------|-------|-------|---|---|---|---------|---------|---------|--------|--------|--|
| Board | Month | Year | Tier | Total | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | |
| AQA | June | 2017 | F | 240 | | | | | 156 65% | 124 52% | 91 38% | 59 25% | 27 11% | |
| AQA | November | 2017 | F | 240 | | | | | 157 65% | 127 53% | 93 39% | 59 25% | 25 10% | |
| AQA | June | 2018 | F | 240 | | | | | 161 67% | 125 52% | 92 38% | 59 25% | 27 11% | |
| AQA | November | 2018 | F | 240 | | | | | 153 64% | 121 50% | 88 37% | 56 23% | 24 10% | |
| AQA | June | 2019 | F | 240 | | | | | 157 65% | 122 51% | 89 37% | 57 24% | 25 10% | |
| AQA | November | 2019 | F | 240 | | | | | 162 68% | 134 56% | 98 41% | 62 26% | 27 11% | |
| AQA | November | 2020 | F | 240 | | | | | 146 61% | 116 48% | 86 36% | 56 23% | 26 11% | |
| AQA | November | 2021 | F | 240 | | | | | 145 60% | 106 44% | 79 33% | 51 21% | 23 10% | |
| AQA | June | 2022 | F | 240 | | | | | 172 72% | 135 56% | 101 42% | 67 28% | 33 14% | |
| AQA | November | 2022 | F | 240 | | | | | 167 70% | 130 54% | 97 40% | 64 27% | 31 13% | |
| Averages | | | | | | | | | 158 66% | 124 52% | 91 38% | 59 25% | 27 11% | |

Higher – grade boundaries

| Exam | | | | | Grade | | | | | | | | | |
|----------|----------|------|------|-------|---------|---------|---------|---------|--------|--------|--------|---|---|--|
| Board | Month | Year | Tier | Total | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | |
| AQA | June | 2017 | H | 240 | 189 79% | 157 65% | 125 52% | 98 41% | 72 30% | 46 19% | 33 14% | | | |
| AQA | November | 2017 | H | 240 | 194 81% | 159 66% | 124 52% | 96 40% | 68 28% | 40 17% | 26 11% | | | |
| AQA | June | 2018 | H | 240 | 201 84% | 169 70% | 138 57% | 107 45% | 77 32% | 47 20% | 32 13% | | | |
| AQA | November | 2018 | H | 240 | 194 81% | 160 67% | 126 53% | 96 40% | 66 28% | 37 15% | 22 9% | | | |
| AQA | June | 2019 | H | 240 | 206 86% | 171 71% | 136 57% | 105 44% | 74 31% | 43 18% | 27 11% | | | |
| AQA | November | 2019 | H | 240 | 199 83% | 168 70% | 137 57% | 107 45% | 78 33% | 49 20% | 34 14% | | | |
| AQA | November | 2020 | H | 240 | 194 81% | 159 66% | 124 52% | 95 40% | 67 28% | 39 16% | 25 10% | | | |
| AQA | November | 2021 | H | 240 | 192 80% | 155 65% | 119 50% | 90 38% | 62 26% | 34 14% | 20 8% | | | |
| AQA | June | 2022 | H | 240 | 214 89% | 185 77% | 156 65% | 121 50% | 86 36% | 51 21% | 33 14% | | | |
| AQA | November | 2022 | H | 240 | 201 84% | 172 72% | 143 60% | 111 46% | 79 33% | 48 20% | 32 13% | | | |
| Averages | | | | | 198 83% | 166 69% | 133 55% | 103 43% | 73 30% | 43 18% | 28 12% | | | |

Topic breakdown

| Topic Area | Foundation Tier (%) | Higher Tier (%) |
|---------------------------------------|---------------------|-----------------|
| Number | 25 | 15 |
| Algebra | 20 | 30 |
| Ratio | 25 | 20 |
| Geometry | 15 | 20 |
| Probability and statistics (combined) | 15 | 15 |

Foundation tier

| Assessment objectives (AOs) | Component weightings (approx %) | | | Overall weighting (approx %) |
|---------------------------------|---------------------------------|---------|---------|------------------------------|
| | Paper 1 | Paper 2 | Paper 3 | |
| AO1 | 40–60 | 40–60 | 40–60 | 50 |
| AO2 | 15–35 | 15–35 | 15–35 | 25 |
| AO3 | 15–35 | 15–35 | 15–35 | 25 |
| Overall weighting of components | 33⅓ | 33⅓ | 33⅓ | 100 |

Higher tier

| Assessment objectives (AOs) | Component weightings (approx %) | | | Overall weighting (approx %) |
|---------------------------------|---------------------------------|---------|---------|------------------------------|
| | Paper 1 | Paper 2 | Paper 3 | |
| AO1 | 30–50 | 30–50 | 30–50 | 40 |
| AO2 | 20–40 | 20–40 | 20–40 | 30 |
| AO3 | 20–40 | 20–40 | 20–40 | 30 |
| Overall weighting of components | 33⅓ | 33⅓ | 33⅓ | 100 |

16 weeks to go...

52 lessons

52 hours

12 pieces of homework

8 – 14 hours

30 minutes a week

8 hours extra

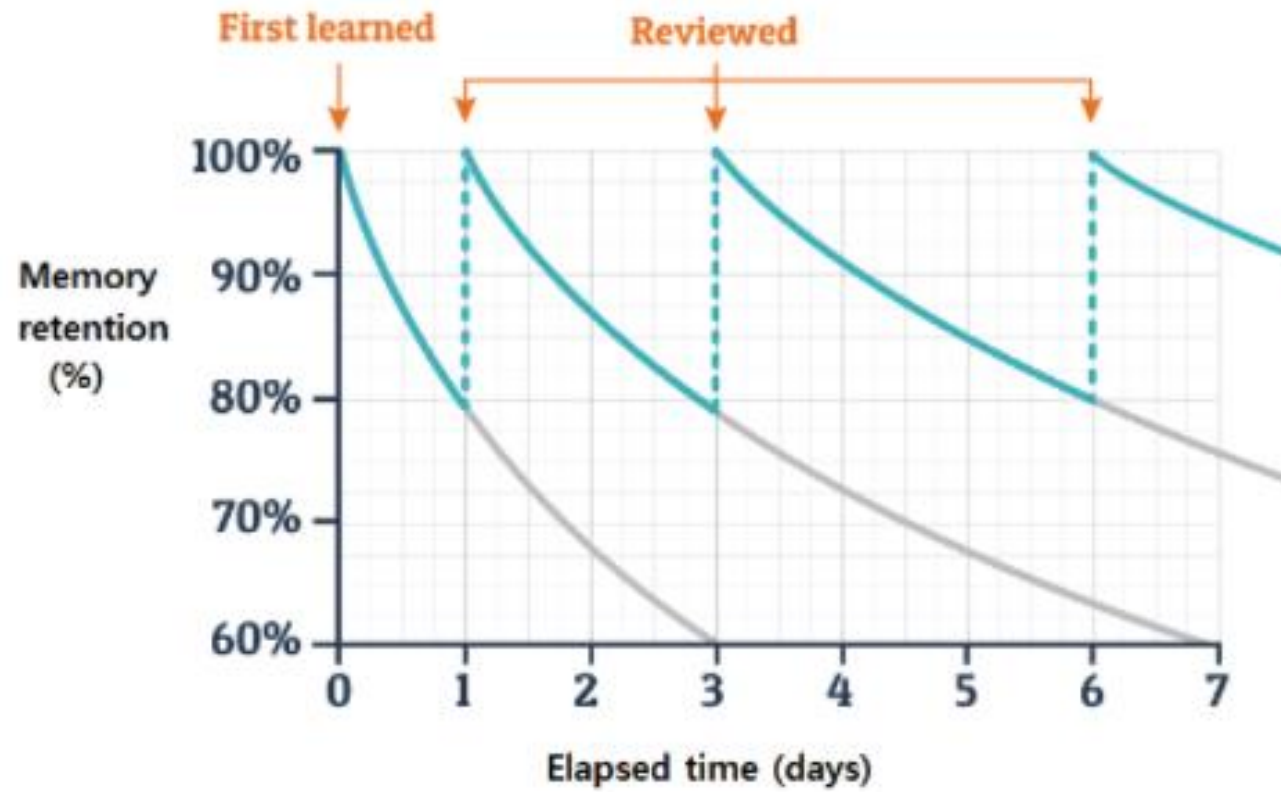
2 x 30 minutes a week

16 hours extra

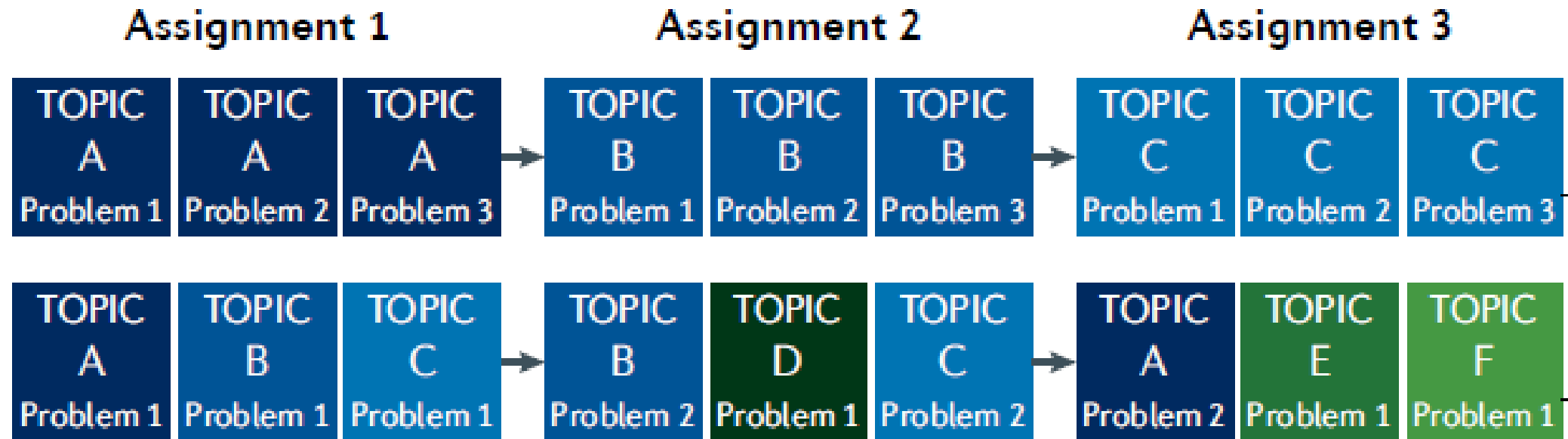
3 x 30 minutes a week

24 hours extra

Forgetting curve



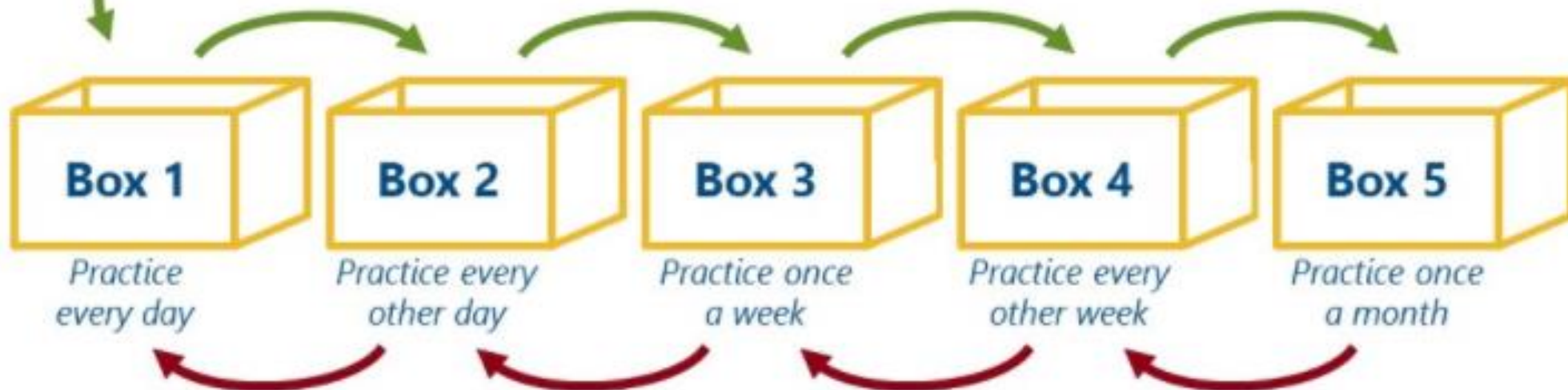
Spaced practice





All flashcards
start in box one

Correctly answered
flashcards move *up* a box



Incorrectly answered
flashcards move *down* a box

Exam papers and practice questions

Practice makes permanent

- Revise Maths by doing Maths
- Timed sessions
- Make it manageable not a prison
- What would the 'ideal' day look like?
- Is work readable, could anyone follow the steps?

Exam papers and practice questions

When working

- Quiet as possible
- Phone in another room
- Make sure that work is marked
- Be honest with ourselves
- Is partnered work possible?

Exam papers and practice questions

Consider the quality of attempts

- Non - attempts
- Low confidence
- Quietly confident
(difficult but manageable)
- Comfortable

Exam papers and practice questions

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- Revise Maths by doing Maths
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- Low confidence
- Quietly confident (difficult but manageable)
- Comfortable

| 16 Jan 23, Higher Paper 1 June 2022 | | | |
|-------------------------------------|----------------------------------|-------|------|
| Student: Mr Scott | | | |
| Question | Objective | Marks | Your |
| 1 | Equation of a line | 1 | 1 |
| 2 | Decimal as a fraction of another | 1 | 1 |
| 3 | Percentage increase calculation | 1 | 1 |
| 4 | Congruence | 1 | 0 |
| 5 | Standard form | 2 | 2 |
| 6(a) | Index laws and evaluation | 2 | 2 |
| 6(b) | Index laws | 2 | 2 |
| 7 | Venn diagram criticism | 2 | 2 |
| 8 | Rates from a graph | 3 | 3 |
| 9(a) | Fraction deduction | 1 | 1 |
| 9(b) | Decimal deduction | 1 | 1 |
| 10 | Construction in context | 3 | 0 |
| 11 | Area of sectors | 4 | 4 |
| 12(a) | Tree diagram | 2 | 0 |
| 12(b) | Expectation from a tree diagram | 3 | 3 |
| 13 | Equation | 2 | 2 |
| 14 | Inverse proportion problem | 3 | 2 |
| 15 | Faces of a prism | 1 | 0 |
| 16 | Cubic graph | 1 | 1 |
| 17 | Cumulative frequency | 3 | 3 |

| | | | |
|-------|----------------------------------|----|----|
| 18 | Identity problem | 3 | 2 |
| 19(a) | Sequence | 1 | 1 |
| 19(b) | Sequence | 2 | 2 |
| 20 | Change the subject | 4 | 2 |
| 21 | Vector geometry | 4 | 2 |
| 22 | Subtracting recurring decimals | 5 | 2 |
| 23 | Inequalities shown on a graph | 3 | 0 |
| 24(a) | Algebraic fractions | 2 | 1 |
| 24(b) | Factorising, algebraic fractions | 4 | 2 |
| 25(a) | Acceleration | 1 | 1 |
| 25(b) | Distance from speed-time graph | 2 | 2 |
| 26 | Probability | 4 | 2 |
| 27 | Graph transformation | 2 | 0 |
| 28 | Exact trig values | 4 | 4 |
| TOTAL | | 80 | 54 |

Useful websites:

- **Mathswatch**
- **GCSE Pod**
- **Seneca learning**
- **Maths genie**
- **Dr Frost Maths**

Useful websites: www.mathsgenie.co.uk

Grade 5


| Videos | Exam Questions | Exam Questions Booklet | Solutions |
|--|--|---|--|
| Writing a Ratio as a Fraction or Linear Function | Exam Questions Exam Questions | Ratio Fraction Problems Ratio Problems 2 | Solutions Solutions |
| Direct and Inverse Proportion | Exam Questions | Direct and Inverse Proportion | Solutions |
| Reverse Percentages | Exam Questions | Reverse Percentages | Solutions |
| Standard Form | Exam Questions | Standard Form | Solutions |
| Speed and Density | Exam Questions | Compound Measures | Solutions |
| Changing the Subject of a Formula | Exam Questions | Changing the Subject of a Formula | Solutions |
| Expanding and Factorising Quadratics | Exam Questions | Expanding and Factorising Quadratics | Solutions |

AQA GCSE Exam Papers


AQA Past papers

| Question Paper | Mark Scheme |
|--|-----------------------------|
| November 2021 Foundation Paper 1 | Mark Scheme |
| November 2021 Foundation Paper 2 | Mark Scheme |
| November 2021 Foundation Paper 3 | Mark Scheme |
| November 2021 Higher Paper 1 | Mark Scheme |

Useful websites: www.drfrostmaths.com

 Menu

dfm

**Demo 11a/ma1 Student**
Acle Academy

What to work on next?

Start a Practice

Review Progress

YOUR COURSES

+Add Course

Start a Practice

By Topic
Practise either exam questions, or to become confident with specific types of questions, practise our Key Skill questions.

Past Papers
Practise collections of questions from different exam boards.

Timestables
Brush up on your mental arithmetic.

Cleanup
Redo 4 questions you recently got incorrect.

Topic section

[UK Curriculum](#) By Course

▼ KS2

▼ KS3/4

▼ Algebra 92 skills

▼ Data Handling & Probability 31 skills

[Averages and Range](#)

[Data Collection](#)

[Data Representation](#)

[Frequency Tables](#)

[Functional Skills](#)

[Probability](#)

▼ Number 91 skills



☐ 56 Probability of mutually exclusive events.

Mastery: 0/100

OR NARROW DOWN

VIDEO DIFFICULTY RECENT ACCURACY

☐ E56: Exam Practice: Probability of mutually exclusive events. [Example](#) 1-4

☐ K56a: Probability of mutually exclusive events. [Example](#) 1

☐ K56b: Find probabilities of mutually exclusive events. [Example](#) 1



☐ 139 Experimental vs Theoretical probabilities, and calculate the former.

Mastery: 0/100

OR NARROW DOWN

VIDEO DIFFICULTY RECENT ACCURACY

☐ E139: Exam Practice: Experimental vs Theoretical probabilities, and calculate the former. [Example](#) 1-4

☐ K139a: Determine the relative frequency of an outcome. [Example](#) 1

☐ K139b: Work out an expected value given repeated trials. [Example](#) 2

Past papers



Past Papers

Past papers from major exam boards such as Edexcel, OCR, AQA, the DfE Skills Testing Agency and the UK Mathematics Trust.



American Maths Association

13 worksheets

The American Maths Challenge and AIME (invitational Olympiad).



AQA

76 worksheets

GCSE papers and Further Maths Level 2 Certificate papers.



Cambridge Mathematical Institute

9 worksheets

The CTMUA, used as the admissions test for prospective undergraduates.



CCEA

29 worksheets

Qualifications for Northern Ireland.



Eduqas

11 worksheets

GCSE papers for the Welsh exam board.



Mathematical Association

21 worksheets

Primary Maths Challenges.



OCR

156 worksheets

GCSE and A Level papers.



Oxford Mathematical Institute

18 worksheets

Mathematical Aptitude Test (MAT) papers, used by Oxford and Imperial for university admissions.



Pearson Edexcel

619 worksheets

GCSE, IGCSE and A Level papers.



SATs

131 worksheets

KS2 and KS3 SATs produced by the UK's Department for Education.



SQA

33 worksheets

Scottish Qualifications Authority. National 5, Higher and Advanced Higher.



UKMT

247 worksheets

Junior, Intermediate and Senior Maths Challenge papers from the UK Mathematics Trust, including Olympiad and Kangaroo papers.



WJEC

92 worksheets

GCSE papers.

Menu

dfm

complete the square

Skills (4)

Downloadables (68)

UK Curriculum

KS2

KS3/4

Algebra

Data Handling
Probability

Averages and
Data Collection

Data Representation

Frequency Tables

Functional Skills

Probability

Number

KS3/4 → Algebra

Formulae and Simplifying Expressions

266

Complete the square to put an expression in the form $(x+a)^2 + b$

E266 - Exam Practice: Complete the square to put an expression in the form $(x+a)^2 + b$

K266a - Complete the square for quadratics of the form $x^2 + bx + c$.

270

Complete the square to put an expression in the form $a(x+b)^2 + c$

E270 - Exam Practice: Complete the square to put an expression in the form $a(x+b)^2 + c$

K270a - Complete the square for quadratics of the form $ax^2 + bx + c$.

OR NARROW DOWN

☐ E139: Exam Practice: Experimental vs Theoretical probabilities, and calculate the former.

☐ K139a: Determine the relative frequency of an outcome.

☐ K139b: Work out an expected value given repeated trials.

Search bar just type in a topic name

Useful websites:

[UK Curriculum](#) By Course

▼ KS2

▼ KS3/4

▼ Algebra 92 skills

▼ Data Handling & Probability 31 skills

[Averages and Range](#)

[Data Collection](#)

[Data Representation](#)

[Frequency Tables](#)

[Functional Skills](#)

[Probability](#)

▼ Number 91 skills


www.dr frostmaths.com


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VIDEO DIFFICULTY RECENT ACCURACY

☐ E56: Exam Practice: Probability of mutually exclusive events. [Example](#)  1-4


☐ K56a: Probability of mutually exclusive events. [Example](#)  1


☐ K56b: Find probabilities of mutually exclusive events. [Example](#)  1

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☐ E139: Exam Practice: Experimental vs Theoretical probabilities, and calculate the former. [Example](#)  1-4

☐ K139a: Determine the relative frequency of an outcome. [Example](#)  1

☐ K139b: Work out an expected value given repeated trials. [Example](#)  2

What might a plan look like?

List of topics

Factorise quadratic equations
(worded exam questions)

Calculate using standard form

Calculate expected outcomes in
probability questions

Q17 In 2017 paper 1
(ask Mr Scott what that is called)

Change the subject of a formula

Session 1 – 30 mins

Factorise quadratic equations
(worded exam questions)

Calculate area of a trapezium

Session 2 – 30 mins

Calculate expected outcomes

Calculate area of a trapezium

Session 3 –exam paper non-calc

Session 4 – 30 mins

Factorise quadratic equations

Calculate expected outcomes

Session 5 – 30 mins

Calculate using standard form

Multiply algebraic fractions

Session 6 –exam paper calc

Exam trackers

| AQA Higher | | | | Name | | | | | | | | | | | | | | | |
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