Structure of the examinations

Paper 1

Paper 2

Paper 3

All papers are **structured** in the same way:

- 80 marks per paper
- 90 minutes to complete
- No formula sheet
- Each paper can assess any topic on the curriculum

This year students have been given a formula sheet. Students will be using this in their upcoming mock examinations.

There are **three** types of questions:

AO1: Use and apply standard techniques

AO2: Reason, interpret and communicate mathematically

AO3: Solve problems within mathematics and other contexts

Advance Information – **FOUNDATION TIER**

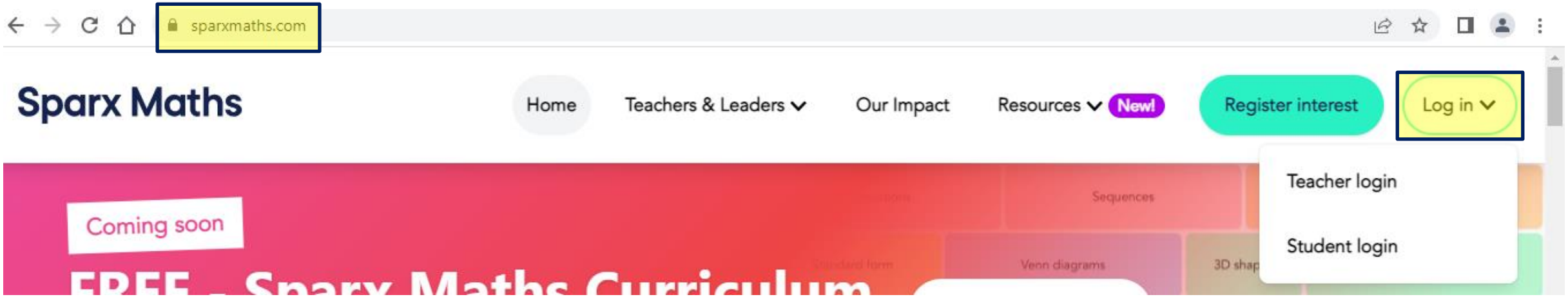
Paper 1

Number
▪ Fractions, Decimals and Percentages ▪ Powers and Roots ▪ BIDMAS ▪ Factors and Multiples ▪ Prime Factors, HCF and LCM ▪ Fractions ▪ Indices ▪ Multiplication and Division
Algebra
▪ Simplifying Algebra ▪ Solving Equations ▪ Forming and Solving Equations ▪ Inequalities ▪ Expanding and Factorising Quadratics
Geometry & Measures
▪ Angles ▪ Transformations ▪ Midpoints ▪ Area and Perimeter
Statistics
▪ Averages ▪ Bar Charts
Probability
▪ Probability
Ratio & Proportion
▪ Direct Proportion ▪ Percentages ▪ Scale Drawings ▪ Ratio ▪ Combining Ratios ▪ Writing a Ratio as a Fraction or Linear Function ▪ Speed and Density

Advance Information – **HIGHER TIER**

Paper 1

Number
▪ Prime Factors, HCF and LCM ▪ Fractions ▪ Fractional and Negative Indices ▪ Multiplication and Division ▪ Factors and Multiples
Algebra
▪ Drawing other graphs: Cubic/Reciprocal ▪ Simultaneous Equations ▪ Proof ▪ Algebraic Fractions ▪ *Geometric Sequences*
Geometry & Measures
▪ Area and Perimeter ▪ Transformations ▪ Sector Areas and Arc Length ▪ Circle Theorems ▪ Trigonometric and Exponential Graphs ▪ Exact Trig Values ▪ The Sine Rule ▪ *Volume and Surface Area of Spheres and Cones*
Statistics
▪ Histograms
Probability
▪ Probability ▪ Conditional Probability
Ratio & Proportion
▪ Direct and Inverse Proportion ▪ *Combining Ratios* ▪ Writing a Ratio as a Fraction or Linear Function ▪ Speed and Density ▪ Fractions, Decimals and Percentages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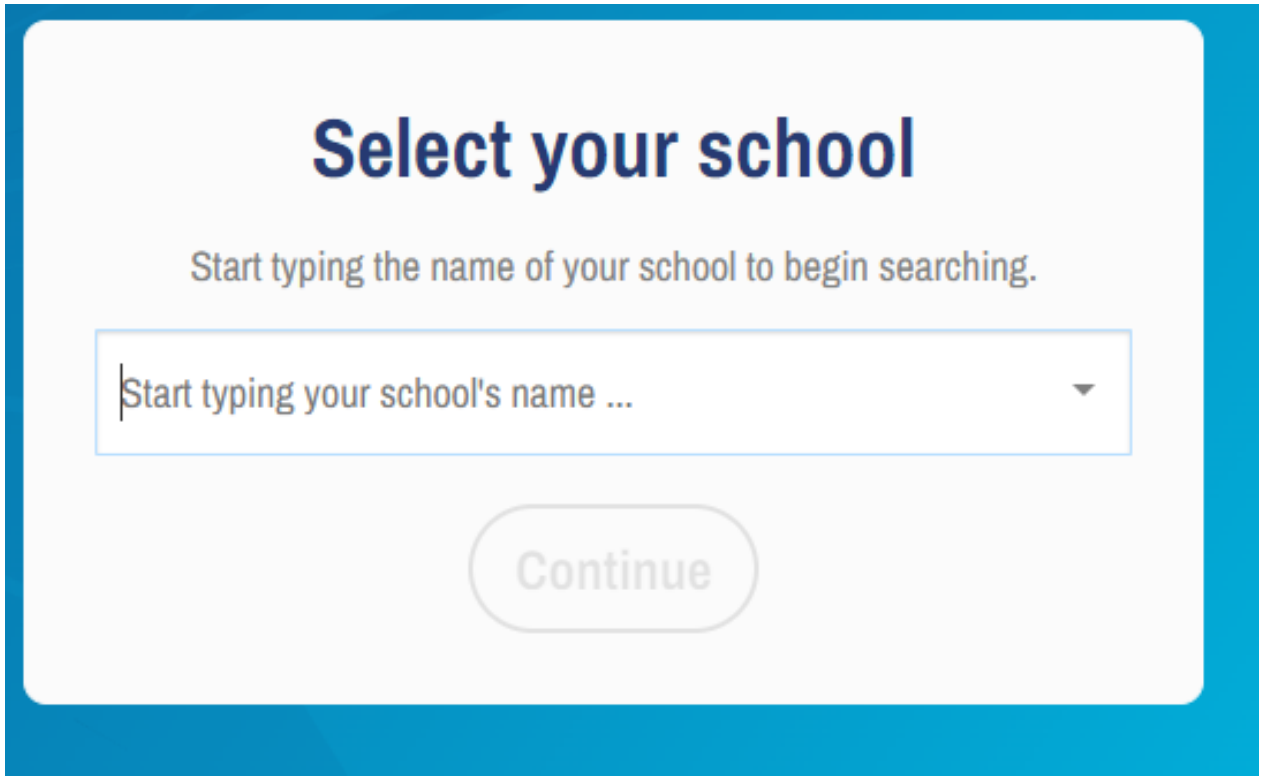
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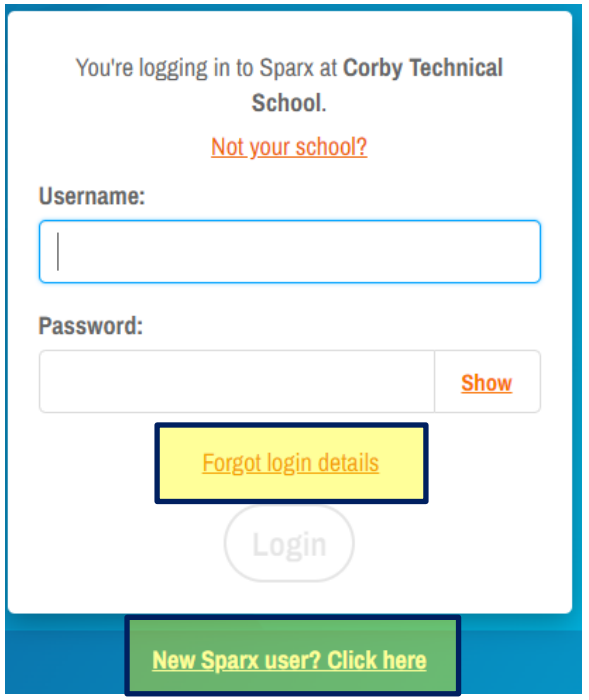
You're logging in to Sparx at Corby Technical School.
Not your school?
Username:
Password:
Show
Forgot login details
Login
New Sparx user? Click here

It is called Sparx – a homework platform that mixes content from recent lessons and practice of previous material. The questions are bespoke to each student, it uses an algorithm to pitch questions to the correct level of difficulty. It also has 'nudge' videos, so that students can refresh their knowledge of a topic if they are struggling. Please see below the presentation which includes videos about Sparx which are useful to both parents and students.

In this section

Admissions & Appeals
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Uniform
Wisepay
Privacy Notice for Parents/Carers
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Compulsory
None available

XP Boost
None available

Target
None available

Sparx Practice

Optional

Independent Learning

Set weekly, mapping to work covered previously in the academic year.

Summary:

- This is work for **outside** of lesson time.
- Use nudge videos to support
- A range of questions from **recent class material** and **retrieval of previous content**.
- **Tailored** to each student.
- No help to be given, but **encouragement** appreciated.
- Excellent **revision** tool!

Key to GCSE Revision!

Compulsory
None available

XP Boost
None available

Target
None available

Sparx Practice

Choose to practice any topic from the Sparx library at any difficulty level.

Search for topics: Enter topic name or code

Your curriculum: GCSE

Default level: Level 3

Select a topic:

- Number
- Algebra
- Ratio and Proportion
- Geometry
- Probability
- Statistics

Independent Learning

Key to GCSE Revision!

Compulsory
None available

XP Boost
None available

Target
None available

Sparx Practice

Independent Learning

Sparx Maths

Foundation Skills List

Number

Topic	Topic code	R	A	G
Ordering positive integers	U600			
Ordering decimals	U435			
Ordering negative numbers	U947			
Adding and subtracting positive integers	U417			
Multiplying and dividing positive integers	U127, U453			
Adding and subtracting negative numbers	U742			
Multiplying and dividing negative numbers	U548			
Adding and subtracting decimals	U478			
Multiplying and dividing with place value	U735			
Multiplying and dividing with decimals	U293, U868			
Order of operations	U976			
Prime numbers, prime factorisation	U236, U739			
Factors, multiples, HCF and LCM	U211, U751, U529			
Powers and roots	U851			
Using standard form	U330, U534			
Calculating with standard form	U264, U290, U161			
Equivalent fractions and simplifying fractions	U704, U646			
Mixed numbers and improper fractions	U692			
Ordering fractions	U746			
Addition and subtraction of fractions	U736, U793			
Multiplication and division of fractions	U475, U544			
Converting and ordering fractions, decimals and percentages	U888, U594			
Fractions of amounts	U881, U916			
Percentages of amounts	U554, U349			
Percentage change	U773, U671			
Reverse percentages	U286, U278			
Simple interest	U533			
Rounding	U480, U298			
Rounding to significant figures	U731, U965			
Estimating answers	U225			
Value for money	M681			

Sparx Maths

Foundation Skills List

Algebra

Topic	Topic code	R	A	G
Algebraic expressions	U613			
Collecting like terms	U105			
Substitution	U201, U585, U144			
Expanding brackets	U179, U768			
Factorising expressions	U365			
Index laws	U235, U694, U662, U103			
Changing the subject	U556			
Coordinates	U789, U889			
Midpoints	U933			
Plotting straight line graphs	U741			
Equations of straight line graphs	U315, U669			
Parallel lines	U377			
Distance-time graphs	U403, U914, U462, U966			
Quadratic graphs	U989, U667			
Linear equations	U755, U325, U870, U505, U599			
Quadratic expressions and equations	U178, U228			
Linear sequences	U213, U530, U498, U978			
Other sequences	U958, U680			

Ratio and proportion

Topic	Topic code	R	A	G
Simplifying ratios	U687			
Sharing amounts in a ratio	U753, U577			
Converting between ratios, fractions and percentages	U176			
Direct proportion	U721, U640			
Inverse proportion	U357, U364			
Proportion graphs	U238			
Units of measure: Length, Mass and Capacity	U102, U388			
Units of measure: Time	U902			
Units of measure: Area	U248			
Currency conversion	U610			
Conversion graphs	U652, U638, U862			

Key to GCSE Revision!

Compulsory
None available

XP Boost
None available

Target
None available

Sparx Practice

Independent Learning

Converting from standard form with a positive index

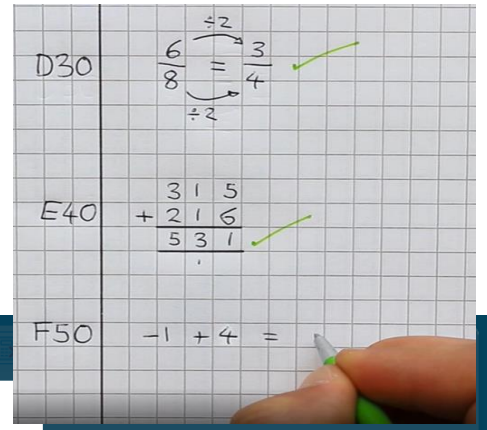
	Question 1	Question 2	Question 3	Question 4	Question 5
Introduce	Answer	Answer	Answer	Answer	Answer
Strengthen	Answer	Answer	Answer	Answer	Answer
Deepen	Answer	Answer	Answer	Answer	Answer

Bookwork code: E40 | Calculator not allowed

Amir is trying to write $38{,}000$ in standard index form.

What value should go in the box below?

$$38{,}000 = \square \times 10^4$$



Bookwork code: E40

Bookwork code

Write down the new bookwork code now.

Done it!

Support video

What value should go in the gap below so that $149{,}000$ is written in standard form?

$$149{,}000 = \_\_\_\_ \times 10^5$$

Standard form: $a \times 10^n$
a is a number between 1 and 10
n is a whole number

To find a, write a decimal point after the first non-zero digit

149 000 = a × 10^5

149 000 = 1.49 × 10^5

1.49 ans

0:00 / 0:58

Key to GCSE Revision!