Year 11 Supporting Success Evening
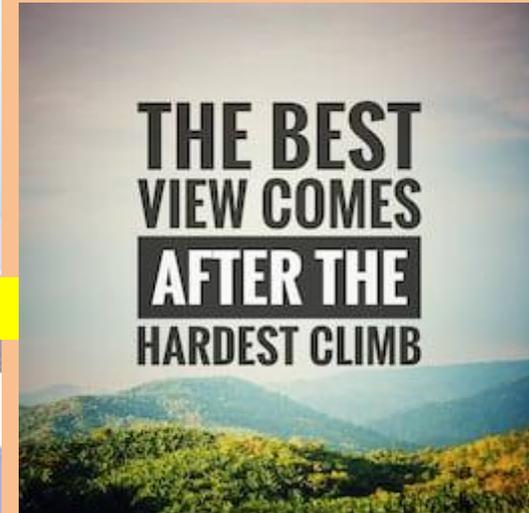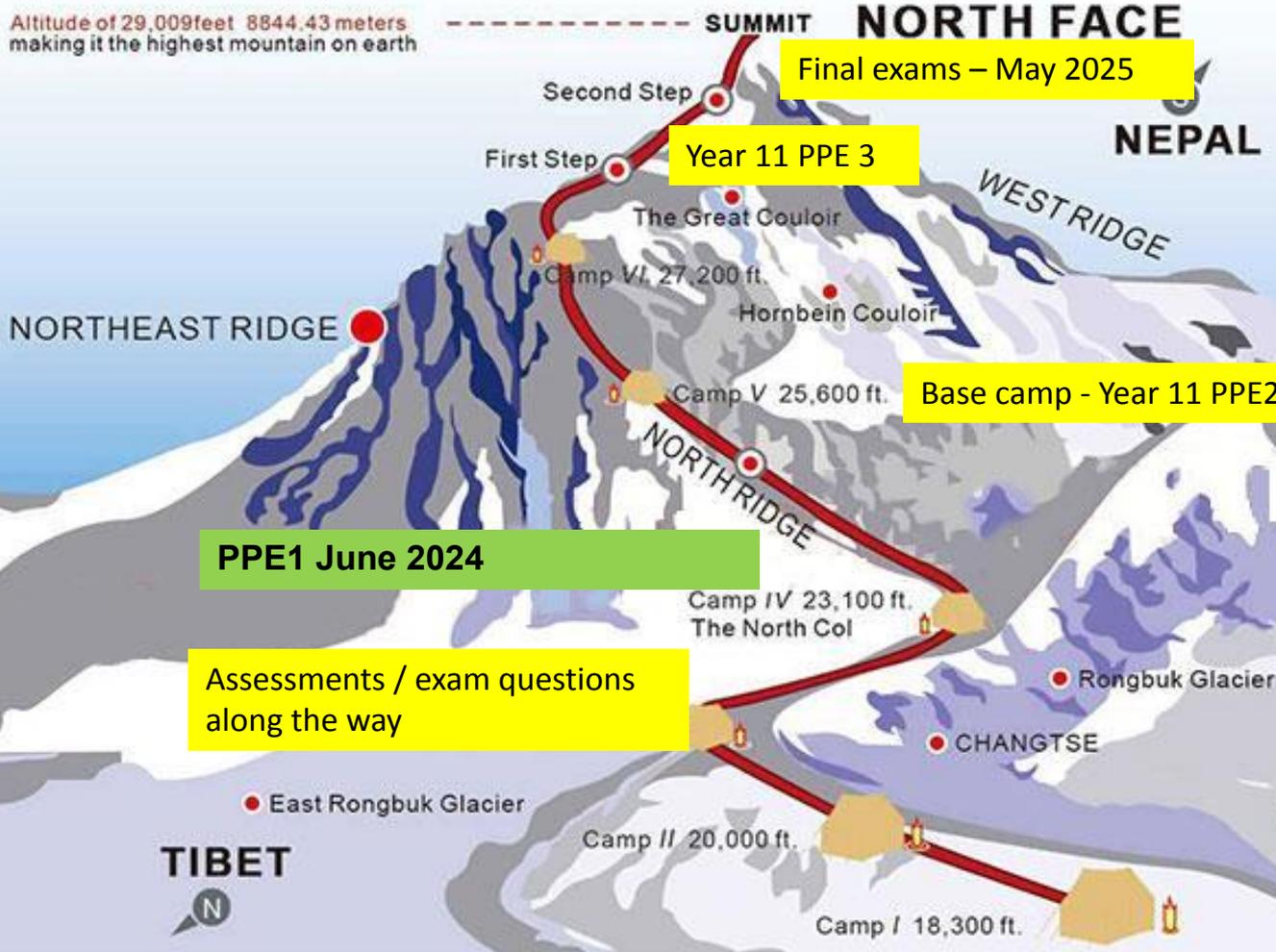
Together we can...

We have INFLUENCE because of our TOGETHERNESS that we cannot have alone

From Base Camp to Summit
GCSE Exams 2025

Altitude of 29,009feet 8844.43 meters making it the highest mountain on earth

Final exams – May 2025

Year 11 PPE 3

Base camp - Year 11 PPE2

PPE1 June 2024

Assessments / exam questions along the way

Start of Year 9 - GCSE exam work

THE BEST VIEW COMES AFTER THE HARDEST CLIMB

How numerical grades compare with old ones

Old grades	Numerical grades
A*	9
	8
A	7
B	6
C	5 Strong Pass
	4 Standard Pass
D	
	3
E	
	2
F	
	1
G	
U	U

PPEs

- PPE 2 will be 25th Nov – 29th Nov

  1 week of exams

  Strategic and specific GCSE questions

- PPE 3 will be 10th Feb – 28th Feb

  Full sets of papers

  As close to the real thing

  Before and after Feb Half term

Student Progress Report Cards

<u>Progress Card: PPE1</u>

Name: XXXXXX   Form:XX

Subject	FFT20 Estimate End of Y11	Predicted End of Y11 Grade Summer 2022	PPE Result July 2022
English Language	7-	7	8
English Literature	6+	N/A	6
French	6+	6	6
History	7=	7	6
Mathematics	6+	6	5
Photography	7=	7	7
Science Combined	6-	5-5	5-5
Theory PE	6+	5	3
Progress 8 Score: +0.58			

Revision carousel / revision strategies week Week commencing 30th September

- How to produce a revision timetable
  How to structure your revision
  'The revision clock'

- How to revise English Language

- The use of flash cards, post it notes and revision cards

- How to reduce your notes – Cornell notes to aid revision

- How to use Self-quizzing, to assess yourself

- Storyboarding / dual coding

Period 7 - 6 weeks prior to PPE and final exams (w/c Mon 7th October)

		Mon	Tue	Wed	Thu	
Period 7 (6 weeks prior to an exam)	**A week**	**Geog**	**Pool D**	**Maths**	**English**	
	B week	**Science**	**Pool A**	**Pool C**	**Pool B**	

Grade 4+ in English Language

English language	2017	69.9
	2018	69.3
	2019	66.1
	2020	68.3
	2021	67.5
	2022	65.9
	2023	66.2
	2024	65.1

Grade 4+ in Maths

Maths		
	2017	70.7
	2018	73.4
	2019	73.2
	2020	74.6
	2021	70.2
	2022	71.7
	2023	70.2
	2024	70.9

English grade 7 and above

Year	Value
2017	16.8
2018	17.5
2019	16.6
2020	18.4
2021	19.7
2022	17.4
2023	17.8
2024	16.4

Maths grade 7 and above

2017	19.9
2018	21.6
2019	22.7
2020	24.4
2021	22
2022	21.2
2023	19.9
2024	22.4

The good news!

	Sherburn High School 2024	National average
Grade 4+ in English and Maths	75%	67%
Grade 5+ in English and Maths	60%	47%
Grade 7+ in English	26%	16.4%
Grade 7+ in Maths	31%	22.4%

PROGRESS 8
2019 - 2024

2019	2022	2023	2024
+0.10	+0.47	+0.17	+0.59

18 out of 22 subjects obtained a positive value added
14 subjects in the top 25% rankings

Why attendance is so important

Attendance groups	Number of students	Average GCSE grade at Sherburn High School	Value added
Above 95%	83	5.7	● +0.5
90.1 - 95%	32	4.8	0.0
80.1 - 90%	23	4.1	0.0
50.1 - 80%	10	3.3	● -0.9
0 - 50%	1	3.4	● -2.1

Where can my results take me?

Level 2 course – GCSE grades 1 -9

Level 2 Apprenticeships, training, Diploma

Level 3 course – A levels, Level 3 Diploma,

Level 3 Apprenticeship

Level 3 courses = 5 GCSEs at 4, or above, including Maths and English Language

Careers Education

1 -1 Careers appointments with Annie Gill

Careers conversations with Miss Miller, Mrs Makin and Form Tutors

23rd October visit to the UK University and Apprenticeship fair at Elland Road

4th December Careers Day

A Levels

Vocational Courses (BTEC/NVQ)

T Levels

Apprenticeships

English Revision

English Language

ENGLISH
SUPPORTING SUCCESS

GCSE English

Students will complete **two separate** GCSEs in English.

AQA **English Language:**

Reading and Writing skills

AQA **English Literature:**

Exploration and analysis of a range of texts.

GCSE English LANGUAGE

Students will have **two exams** at the end of Year 11.

Paper 1: 50%

Section A: Students read and respond to a fiction text extract

Section B: Students write a description or short story.

Paper 2: 50%

Section A: Students read and respond to two non-fiction texts

Section B: Students write their own article, letter, or speech.

GCSE English LANGUAGE

So what **CAN** you do to revise English Language?

1. Read, Read, Read! It doesn't matter what you read, just make sure you're reading.

2. Be Proactive! If you've been told for years that your apostrophes aren't right – now is the time to learn how to use these properly.

GCSE English LANGUAGE

GCSE English LITERATURE

Students will have **two exams** at the end of Year 11.

Paper 1: 40%

Section A: Students write one essay questions on **JULIUS CAESAR**

Section B: Students write one essay on **A CHRISTMAS CAROL**

Paper 2: 60%

Section A: Students answer one question on **AN INSPECTOR CALLS**

Section B: Students answer one question on **POETRY ANTHOLOGY**
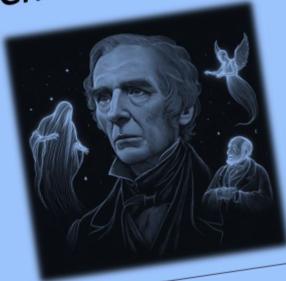
Section C: Students answer two questions on **UNSEEN POETRY**

GCSE English LITERATURE

Use your Course Readers

GCSE English Literature:
A Christmas Carol

Name:
Class:
Teacher:
Class of 2025

GCSE English Literature:
Julius Caesar

Name:
Class:
Teacher:

GCSE English Literature:
An Inspector Calls

Name:
Class:
Teacher:
Class of 2025

GCSE English LITERATURE

How to revise for English Literature:

1. Flashcards – especially good for quotations
2. Revision grids
3. Mindmaps
4. Group revision
5. Practice questions
6. Note taking
7. Re-reading the texts … again and again
8. Planning your time

GCSE English LITERATURE

1 START AS EARLY AS YOU CAN
Cramming at the last minute is stressful and has limited success.

2 MAKE A PLAN
Work out how much time you have and how long you can spend on each subject.

3 CREATE A STUDY SPACE
Find a quiet spot away from distractions and keep your things all in one place.

4 MIX IT UP
Use a mixture of revision for best results. See our metacognition pods for more info.

5 TAKE REGULAR BREAKS
It is possible to work too hard, make sure to take regular breaks.

6 REVISE WITH A FRIEND
Talking through what you've learned can help information stick.

7 USE PAST PAPERS
These are a great way to get used to exam format and testing what you have learnt.

8 EAT HEALTHY
Certain foods boost your brainpower and will help you remember more.

The BEST Revision Guide…

WARNING

Some are great, some are terrible!

Y11 Maths
Striving for Success

Edexcel

3 X1 hour 30 min papers

- One non calculator paper and two calculator papers

- Higher (grades 9-3) or Foundation (grades 5-1)

- Crossover of questions approximately 25%

Exam Practice and Revision

Question	Topic	Marks																		
1	Add fractions	3	3	3	0	3	2	0	3	3	0	3	3	3	3	3	3	3	3	2
2a	Interpreting Y intercept in realtion to question	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1
2aii	Interpreting gradient in realtion to question	1	1	0	1	1	0	1	0	0	1	1	1	1	1	0	0	1	1	1
2b	Find the equation of a straight line	3	2	3	3	3	3	2	3	3	3	3	3	1	0	3	0	3	2	3
3	Compound area	5	1	5	4	5	3	3	3	5	5	0	5	5	1	5	1	1	3	5
4	Speed distance time word problem	4	4	4	2	4	4	2	4	2	4	4	2	4	4	4	4	0	4	4
5a	Area - tiling problem with ratio and fractions	5	1	5	5	4	0	5	1	1	2	1	5	5	1	5	0	0	5	5
5b	Expalnation of result on tiles needed if gaps left	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Travel graph with speed distance time	4	4	2	2	4	2	1	4	4	3	1	1	3	2	2	0	1	0	3
7	Estimating	3	0	2	2	2	0	2	2	3	2	2	0	2	0	3	2	0	2	2
8	Translating shapes using vectors	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	0	2	2

Independent revision

Q	Topic	Out of	Mark
1	Convert cm to ml	1	0
2	Simplify algebra	1	0
3	Reflect in mirror line	1	1
4	Write value of a digit in a number	1	1
5	Order percentage decimal fraction	1	1
6	Interpret pictogram	1	1
7	Money problem - how many can you buy with £20	3	3
8a	Complete bar chart	2	2
8b	Explain incoreect interpretation	1	1
9	Draw pattern and complete table for sequence	2	2
10	Difference in temerature (negative)	2	2
11	Difference in electricity used then multiply by cost	4	3
12a	Add fractions	2	2
12b	Multiply fractions and simplify	2	2
13	Calculating proability	2	2
14	Substitution	2	1
15a	Estimate calculation	2	0
15b	Given one calculation calculate another with same digits	1	0
16	SDT	4	0
17a	Complete frequency tree	3	3
17b	Probability from frequency tree	2	1
18	Recipe question	2	0
19	Increase by a percentage	3	0
20	Fraction problem	3	0
21	Draw stem and leaf	3	2
22	Calculate volume from plan and side view of cylinder	3	0
23	Solve inequality	2	1
24	Product of primes	2	0
25	Ratio and fraction problem solving	5	0
26	Standard form	4	0
27	Angles in polygons	3	0
28ab	Complete table and draw quadratic graph	4	2
28c	Solve quadratic = 0 using graph	2	0
29	Mass density volume	3	0
30	Exact value of sine 30	1	0
0	Total	80	33

Orange books Revision guides

Left page (handwritten):

Dividing with decimals

▲ If the number you're dividing [by]
use bus stop

▲ If you are dividing by a dec[imal]
use the method below

Example 1:

$4 \div 0.8 = \dfrac{4}{0.8}$ write as a fracti[on]

$= \dfrac{4}{0.8}$ (×10)

$5 = \dfrac{40}{8}$

Example 2:

$0.12 \div 0.004$
$=$
$\dfrac{0.12}{0.004} \times 1000 = \dfrac{120}{4} = 30$

Right page (handwritten):

Example 1:

Factorise $x^2 + 9x + 18$

needs x's a beginning [of]
they make x^2

$(x + 3)(x + 6)$

These numbers are found quickly and are made from the numbers in the brackets.

2 brackets as it's a quadratic

These two numbers have to add to get 9 and multiply to get 18.

Check!

$(x + 3)(x + 6)$
$= x^2 + 6x + 3x + 18$
$= x^2 + 9x + 18$

MATHS Genie

Grade 4

Videos	Exam Questions	Exam Questions Booklet	Solutions
Compound Interest and Depreciation	Exam Questions	Compound Interest and Depreciation	Solutions
Indices	Exam Questions	Indices	Solutions
HCF and LCM	Exam Questions	HCF, LCM	Solutions
Functional Maths Questions	Exam Questions	Functional Questions	Solutions
Inequalities	Exam Questions	Inequalities	Solutions
Forming and Solving Equations		Forming and Solving Equations	Solutions
Types of Sequences			
Generating Sequences			
Sequences (Nth Term)	Exam Questions	Sequences (nth term)	Solutions
Expanding and Factorising	Exam Questions	Expand and Factorise	Solutions
Pythagoras	Exam Questions	Pythagoras	Solutions
Angle Problems		Angles	Solutions
Angles in Parallel Lines	Exam Questions	Angles in Parallel Lines	Solutions
Angles in Polygons	Exam Questions	Angles in Polygons	Solutions
Surface Area	Exam Questions	Surface Area	Solutions

Grade 1/2

Videos	Exam Questions Booklet	Solutions
Addition and Subtraction	Addition and Subtraction	Solutions
Multiplication and Division	Multiplication and Division	Solutions
Rounding		
Estimating	Estimating	
Powers and Roots	Powers and Square Roots	Solutions
Factors and Multiples	Factors, Multiples and Primes	Solutions
Fractions of an Amount	Fractions of an Amount	Solutions
Fractions, Decimals and Percentages	Fractions, Decimals and Percentages	Solutions
Negative Numbers	Negative Numbers	Solutions
BIDMAS	BIDMAS	Solutions
Simplifying Algebra	Collecting Like Terms	Solutions
Angles	Angles	Solutions
Area	Perimeter, Area and Volume	Solutions
Perimeter		
Area of a Trapezium		
Averages	Mean, Median, Mode and Range	Solutions
Frequency Polygons	Frequency Polygons	Solutions
Stem and Leaf	Stem and Leaf	Solutions
Bar Charts	Bar Charts	Solutions
Pie Charts	Pie Charts	Solutions

Grade 3

Videos	Exam Questions	Exam Questions Booklet	Solutions
Error Intervals	Exam Questions	Error Intervals	Solutions
Fractions		Fractions	Solutions
Writing and Simplifying Ratio			
Ratio	Exam Questions	Ratio	Solutions
Proportion		Proportion Ingredients Questions	Solutions
Percentages	Exam Questions	Percentages	Solutions
Percentage Change			
Exchange Rates	Exam Questions	Exchange Rates	Solutions
Best Buy Questions	Exam Questions	Best Buys	Solutions
Substitution		Substitution	Solutions
Solving Equations			
Solving Equations with an Unknown on Both Sides		Solving Equations	Solutions
Drawing Graphs		Drawing Graphs	Solutions
Area and Circumference of Circles		Circles	Solutions
Transformations		Rotations Reflections Enlargements Translations Mixed Transformations	Rotations Solutions Reflections Solutions Enlargements Solutions Translations Solutions Mixed Transformations Solutions
Area of Compound Shapes	Exam Questions	Area of Compound Shapes	Solutions
Probability	Exam Questions	Probability	Solutions
Two Way Tables		Two Way Tables	Solutions

Grade 4

Videos	Exam Questions	Exam Questions Booklet	Solutions
Compound Interest and Depreciation	Exam Questions	Compound Interest and Depreciation	Solutions
Indices	Exam Questions	Indices	Solutions
HCF and LCM	Exam Questions	HCF, LCM	Solutions
Functional Maths Questions	Exam Questions	Functional Questions	Solutions
Inequalities	Exam Questions	Inequalities	Solutions
Forming and Solving Equations		Forming and Solving Equations	Solutions
Types of Sequences			
Generating Sequences			
Sequences (Nth Term)	Exam Questions	Sequences (nth term)	Solutions
Expanding and Factorising	Exam Questions	Expand and Factorise	Solutions
Pythagoras	Exam Questions	Pythagoras	Solutions
Angle Problems		Angles	Solutions
Angles in Parallel Lines	Exam Questions	Angles in Parallel Lines	Solutions
Angles in Polygons	Exam Questions	Angles in Polygons	Solutions
Surface Area	Exam Questions	Surface Area	Solutions
Volume of Prisms	Exam Questions	Volume of Prisms	Solutions
Cylinders	Exam Questions	Volume and Surface Area of Cylinders	Solutions
Loci and Construction		Loci and Construction	Solutions
Bearings		Bearings	Solutions
Averages from Frequency Tables	Exam Questions	Averages from Frequency Tables	Solutions
Probability	Exam Questions	Probability	Solutions
Scatter Graphs		Scatter Graphs	Solutions

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		Reverse Percentages	Solutions
Standard Form		Standard Form	Solutions
Speed and Density		Speed and Density	Solutions
Changing the Subject of a Formula	Exam Questions	Changing the Subject of a Formula	Solutions
Expanding and Factorising Quadratics		Expanding and Factorising Quadratics	Solutions
Solving Quadratics		Solving Quadratics	Solutions
Drawing Quadratic Graphs		Drawing Quadratic Graphs	Solutions
Drawing Other Graphs: Cubic/Reciprocal		Cubic/Reciprocal Graphs	Solutions
Simultaneous Equations	Exam Questions	Simultaneous Equations	Solutions
Solving Simultaneous Equations Graphically		Solving Simultaneous Equations Graphically	Solutions
Midpoint of a Line Segment			
Gradient of a Line	Exam Questions	Gradient of a Line	Solutions
Equation of a Line	Exam Questions	Equation of a Line	Solutions
Spheres and Cones		Spheres and Cones	Solutions
Sector Areas and Arc Lengths		Sectors and Arcs	Solutions
Similar Shapes (Lengths)	Exam Questions	Similar Shapes (Lengths)	Solutions
SOHCAHTOA (Trigonometry)	Exam Questions	SOHCAHTOA	Solutions
Exact trig values			
Vectors		Vectors	Solutions
Probability Trees		Probability Trees	Solutions
Venn Diagrams		Venn Diagrams	Solutions

Grade 6

Videos	Exam Questions	Exam Questions Booklet	Solutions
Recurring Decimals to Fractions	Exam Questions	Converting Recurring Decimals to Fractions	Solutions
Fractional and Negative Indices	Exam Questions	Fractional and Negative Indices	Solutions
The Product Rule for Counting	Exam Questions	The Product Rule for Counting	Solutions
Repeated Percentage Change	Exam Questions	Repeated Percentage Change	Solutions
Expanding Triple Brackets	Exam Questions	Expanding Triple Brackets	Solutions
Parallel and Perpendicular Lines	Exam Questions	Parallel and Perpendicular Lines	Solutions
Length of a Line			
Inequalities on Graphs		Inequalities on Graphs	Solutions
Similar Shapes (Area and Volume)	Exam Questions	Similar Shapes (Area and Volume)	Solutions
Enlarging with Negative Scale Factors		Enlarging with Negative Scale Factors	Solutions
Circle Theorems		Circle Theorems	Solutions
Cumulative Frequency		Cumulative Frequency	Solutions
Box Plots	Exam Questions	Box Plots	Solutions

Grade 7

Videos	Exam Questions	Exam Questions Booklet	Solutions
Surds	Exam Questions	Surds	Solutions
Bounds	Exam Questions	Bounds	Solutions
Direct and Inverse Proportion	Exam Questions	Direct and Inverse Proportion	Solutions
Quadratic Formula	Exam Questions	Quadratic Formula	Solutions
Factorising Harder Quadratics	Exam Questions	Factorising Harder Quadratics	Solutions
Algebraic Fractions	Exam Questions	Algebraic Fractions	Solutions
Rearranging Harder Formulae	Exam Questions	Rearranging Harder Formulae	Solutions
Harder Graphs: Trig/Exponential		Harder Graphs: Trig/Exponential	Solutions
Inverse and Composite Functions	Exam Questions	Inverse and Composite Functions	Solutions
Iteration	Exam Questions	Solving Equations using Iteration	Solutions
Finding the Area of Any Triangle	Exam Questions	Finding the Area of Any Triangle	Solutions
The Sine Rule	Exam Questions	The Sine Rule	Solutions
The Cosine Rule	Exam Questions	The Cosine Rule	Solutions
Congruent Triangles		Congruent Triangles	Solutions
3d Pythagoras		3d Pythagoras	Solutions
Histograms		Histograms	Solutions
Venn Diagrams ("Given that" questions)	Exam Questions	Venn Diagrams	Solutions

Grade 8/9

Videos	Exam Questions	Exam Questions Booklet	Solutions
Quadratic Simultaneous Equations	Exam Questions	Quadratic Simultaneous Equations	Solutions
Transforming Graphs y=f(x)		Transforming Graphs y=f(x)	Solutions
Proof	Exam Questions	Proof	Solutions
Completing the Square	Exam Questions	Completing the Square	Solutions
The Nth Term of a Quadratic Sequence	Exam Questions	Quadratic Sequences	Solutions
Quadratic Inequalities	Exam Questions	Quadratic Inequalities	Solutions
Velocity Time Graphs		Velocity Time Graphs	Solutions
Proof of the Circle Theorems	Exam Questions	Proof of the Circle Theorems	Solutions
Perpendicular Lines and the equation of a tangent	Exam Questions	Perpendicular Lines	Solutions
Vectors Proof Questions	Exam Questions	Vectors	Solutions
Probability Equation Questions	Exam Questions	Probability Equation Questions	Solutions

15. Solve $\qquad$ $3y + 10 = 5y + 3$

16. Solve $\qquad$ $2y + 17 = 6y + 5$

14. Solve $5y + 1 = 3y + 13$

$$5y + 1 = 3y + 13$$
$$-3y \qquad -3y$$
$$\overline{ 2y + 1 = 13}$$
$$ -1 \qquad -1$$
$$\overline{ 2y = 12}$$
$$ \div 2$$
$$\div 2$$

$y =$ ....6.........

(3 marks)

---

15. Solve $3y + 10 = 5y + 3$

$$3y + 10 = 5y + 3$$
$$-3y \qquad -3y$$
$$\overline{ 10 = 2y + 3}$$
$$ -3 \qquad -3$$
$$\overline{ 7 = 2y}$$
$$ \div 2 \qquad \div 2$$

$y =$ ....3·5.........

(3 marks)

JUST MATHS

2. The diagram shows a square.

   All the lengths are measured in centimetres.

   Diagram not drawn to scale

   Use an algebraic method to find the length of one side of the square.

$4x + 5$

$6x - 2$
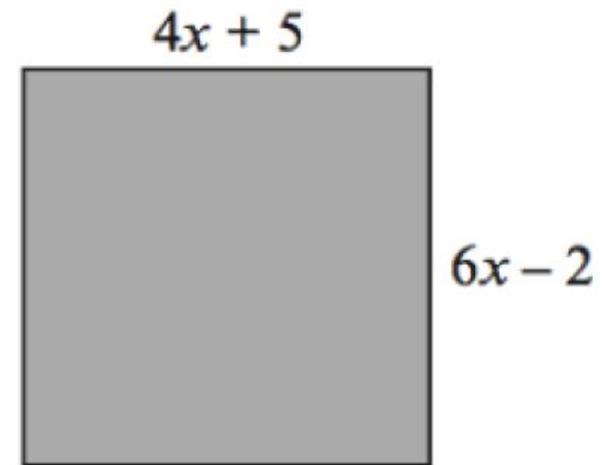
Diagram not drawn to scale

[5]

2. The diagram shows a square.

All the lengths are measured in centimetres.

Diagram not drawn to scale

Use an algebraic method to find the length of one side of the square.

$$4x + 5 = 6x - 2$$
$$(-4x) \qquad (-4x)$$
$$5 = 2x - 2$$
$$(+2) \qquad (+2)$$
$$2x = 7$$
$$x = 3.5$$

$$\therefore 4x + 5$$
$$4 \times 3.5 + 5$$
$$= 19cm$$

$4x + 5$

$6x - 2$
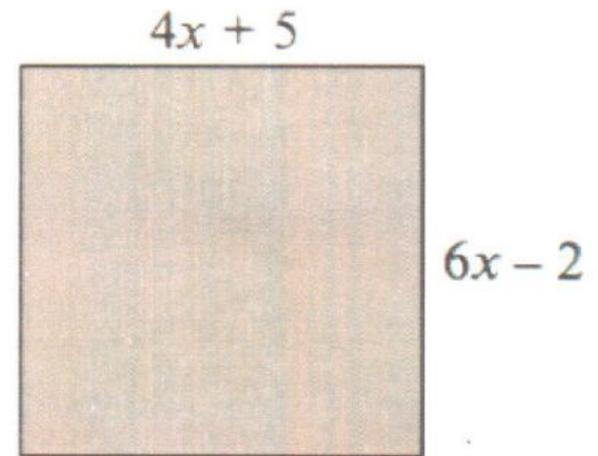
Diagram not drawn to scale

[5]

Exam Papers

Write your name here

Surname		Other names

Pearson Edexcel
Level 1/Level 2 GCSE (9-1)

Centre Number

Candidate Number

Mathematics

Paper 1 (Non-Calculator)

Foundation Tier

Thursday 2 November 2017 – Morning	Paper Reference
Time: 1 hour 30 minutes	**1MA1/1F**

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser. Tracing paper may be used.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- **Calculators may not be used.**

---

5 Here are the first four terms of a number sequence.

$$2 \qquad 5 \qquad 11 \qquad 23$$

The rule to continue this sequence is

multiply the previous term by 2 and then add 1

Work out the 5th term of this sequence.

....

(Total for Question 5 is 1 mark)

---

6 Here are five straight rods.

$\leftarrow a-1\rightarrow$ $\longleftarrow a \longrightarrow$ $\longleftarrow a \longrightarrow$ $\longleftarrow a \longrightarrow$ $\longleftarrow a+4 \longrightarrow$
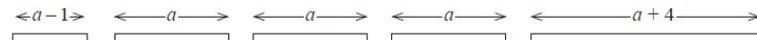
All measurements are in centimetres.

The total length of the five rods is L cm.

Find a formula for L in terms of a.
Write your formula as simply as possible.

Period 7

Help and support within the department

GCSE Science

Students will gain at least two GCSEs

Students will sit 6 papers, 2 biology, 2 chemistry and 2 physics. Each paper is 1hr15.

Marks from all papers will be added together to award the final grade.

Combined Science

For Combined Science:

Higher

Foundation

9-9
9-8
8-8
8-7
7-7
7-6
6-6
6-5
5-5
5-4
4-4
4-3
3-3
3-2
2-2
2-1
1-1

Marks from all papers will be added together to award the final grade.

GCSE Science

Assessment objectives	Overall Weighting %
Demonstrating Knowledge	40
Applying Knowledge	40
Analysing information and ideas	20

Subject Title	Maximum Mark	Grade Boundaries												
		99	98	88	87	77	76	66	65	55	54	44	43	33
COMBINED SCI: TRILOGY TIER F	420									242	222	203	175	148
COMBINED SCI: TRILOGY TIER H	420	276	257	238	220	202	183	164	145	126	107	89	80	

63%

53%

68%

51%

35%

The BEST Revision Guide…

Chemistry Topic 2: Bonding, Structure, and the properties of matter

1. Keywords

Ionic bond	When a metal donates electrons to a non-metal forming opposite charged ions that are attracted to each other
Covalent bond	A shared pair of electrons between two non-metals
Metallic bond	Positive metal ions in a 'sea' of delocalised electrons
Ions	Charged atoms which have either gained or lost electrons
Electrons	Negative particles found in the shells of atoms
Group 0	The unreactive 'noble gases' all elements aim to get to group 0 electron configuration when they react
Dot and cross diagrams	The simplest way we show the bonding in atoms
Polymer	A long chain molecule made up of repeating monomers
Monomer	The small molecules that join together to make polymers
Delocalised	Electrons which are free to move anywhere
Alloy	A mixture of a metal and another element to change its properties

2. The process of ionic bonding
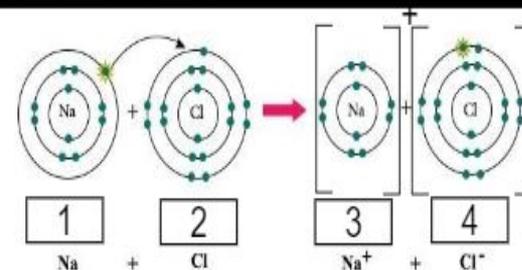
No	Name	Electron movement	Charge	Electron configuration	Does it have a full outer shell?
1	Sodium atom	0	0	2,8,1	No
2	Chlorine atom	0	0	2,8,7	No
3	Sodium ion	Lost 1	+1	2,8	Yes
4	Chloride ion	Gained 1	-1	2,8,8	Yes
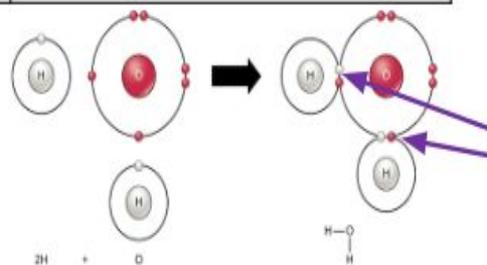
Make sure both electrons are in the overlap of the outer shells

3. The process of covalent bonding

1	Non metals share their outer unpaired electrons
2	Now all outer shell spaces appear full
3	There is no change in charge. They remain uncharged

Revision Guides
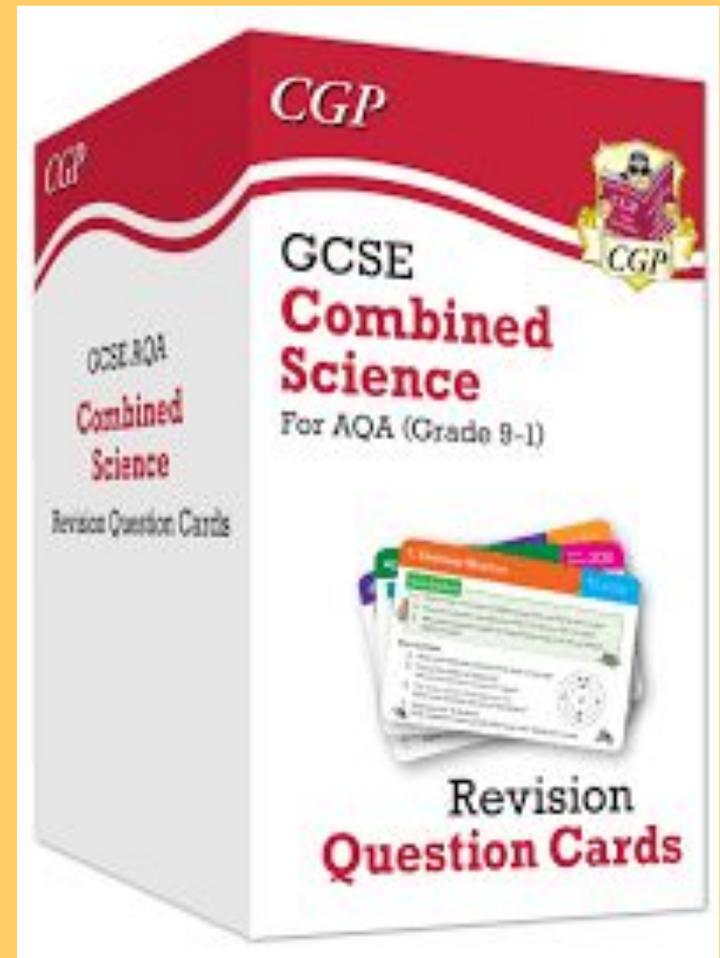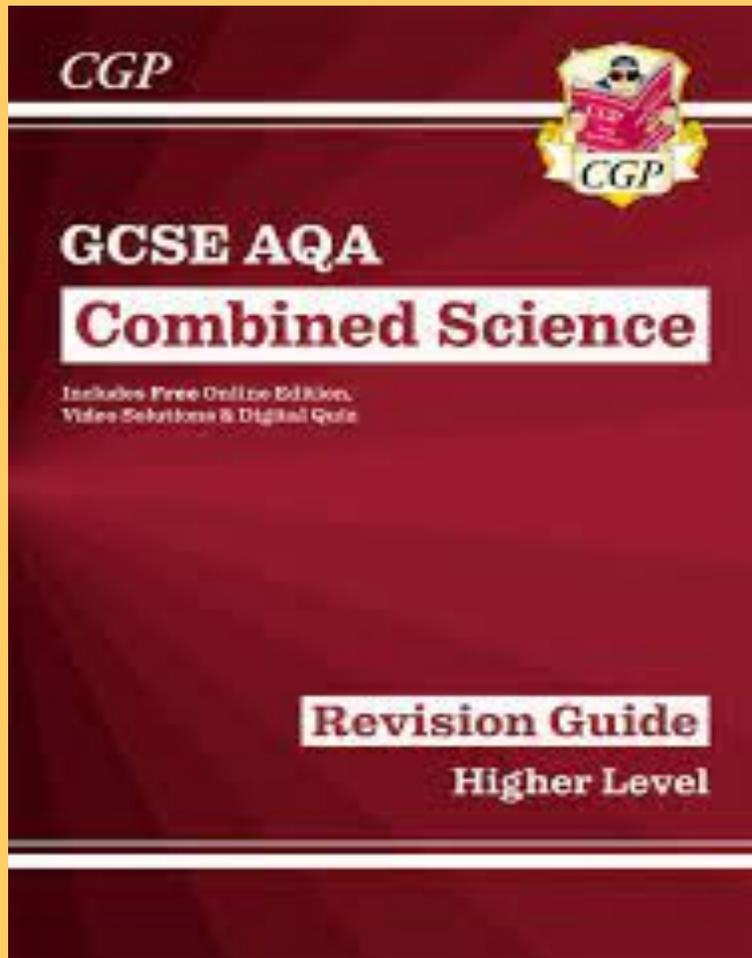
GCSE Science

How to revise for Science:

1. Flashcards – especially good for knowledge
2. Revision grids
3. Mindmaps
4. **Exam questions**
5. **Planning your time, start early so you have time to revisit**

Forces

GRADE 1-3

http://QOTIYIU.exampro.net

http://OYAIAAR.exampro.net

GRADE 4-6

http://KUZEJUI.exampro.net

http://FEAOOIQ.exampro.net

GRADE 7-9

http://RYBUMIX.exampro.net

http://HIFIBES.exampro.net

Waves

GRADE 1-3

http://RYVUGUD.exampro.net

Question | Mark Scheme

1 2 3 4 5 6 7 8 9 10 11

Diabetes is a disease in which the concentration of glucose in a person's blood may rise to fatally high levels.
Insulin controls the concentration of glucose in the blood.

(a)   Where is insulin produced?

Draw a ring around **one** answer.

gall bladder   **liver**   **pancreas**

(1)

(b)   People with diabetes may control their blood glucose by injecting insulin.

(i)   If insulin is taken by mouth, it is digested in the stomach.

What type of substance is insulin?

Draw a ring around **one** answer.

carbohydrate   **fat**   **protein**

(1)

(ii)   Apart from using insulin, give **one** other way people with diabetes may reduce their

% Information Retained

Original learning

First review

Second review

Third review
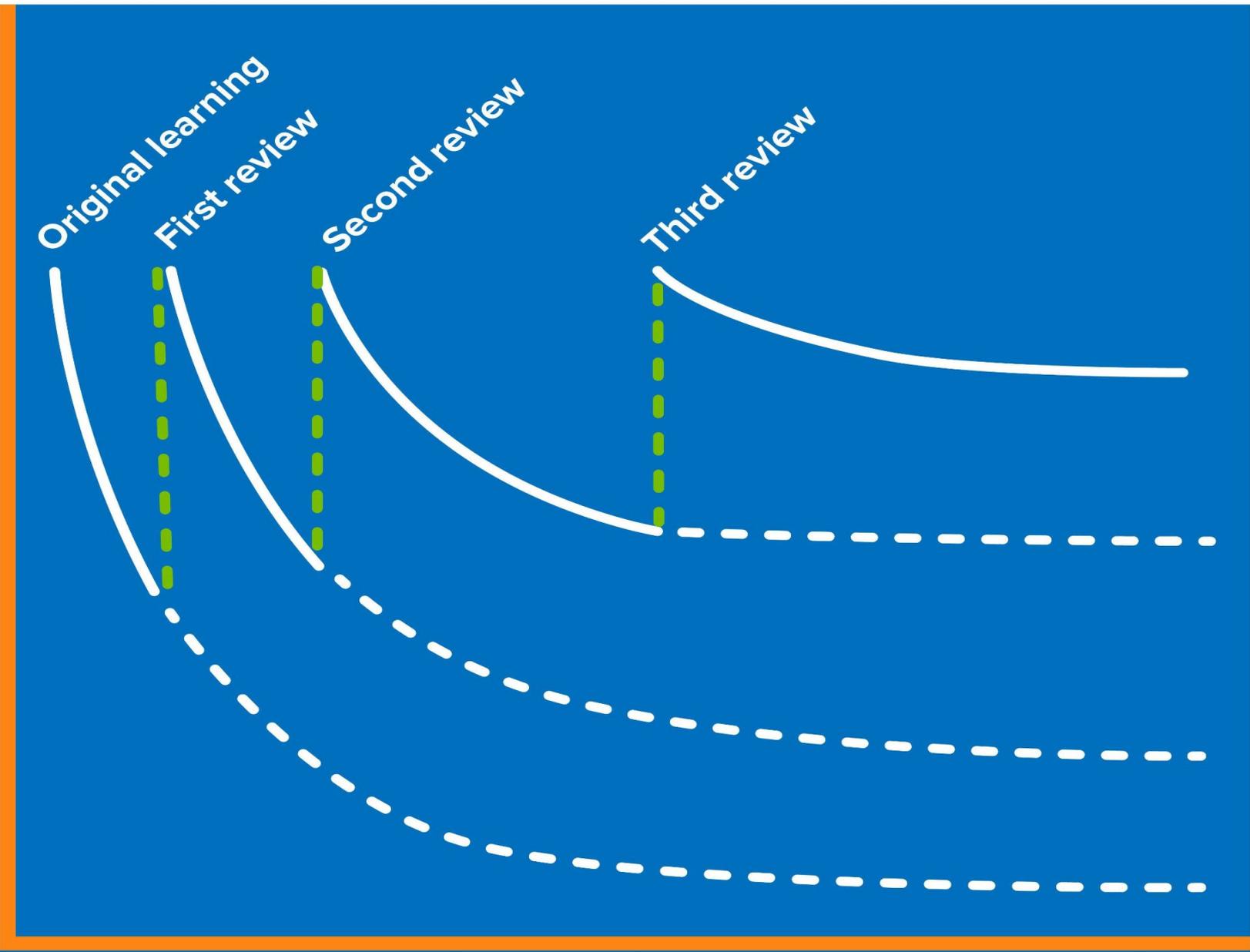
Time Elapsed

Sixth Form Open Evening
Thursday 17th October
6:00pm-7:30pm

Join us in Sixth Form.

The Sixth Form Team

Miss Jackson - Head of Sixth Form

Mrs Gaddas - Sixth Form Attendance and Pastoral Officer

Mrs Nye - Assessment Hour Mentor

Year 12 Mentors:
Mrs Davies
Mr Hall

Year 13 Mentors:
Mrs Kesterton
Mrs Linskey

Sherburn
High School

6TH FORM
ACHIEVE YOUR
POTENTIAL

Our Vision

Our vision for you is that you spend the next two years discovering and realising your full potential.

You will be offered a wide range of opportunities:

- personal
- academic
- social

Make the most of every opportunity you are offered during your time here.

Our Commitment

We will provide you with:

- first class teaching and assessment

- age appropriate, relevant personal development lessons

- focused, bespoke preparation for higher education and the world of work.

In return, you will take responsibility for your own learning and you will challenge yourself to meet our high standards.

Sherburn
High School

6TH FORM
ACHIEVE YOUR
POTENTIAL
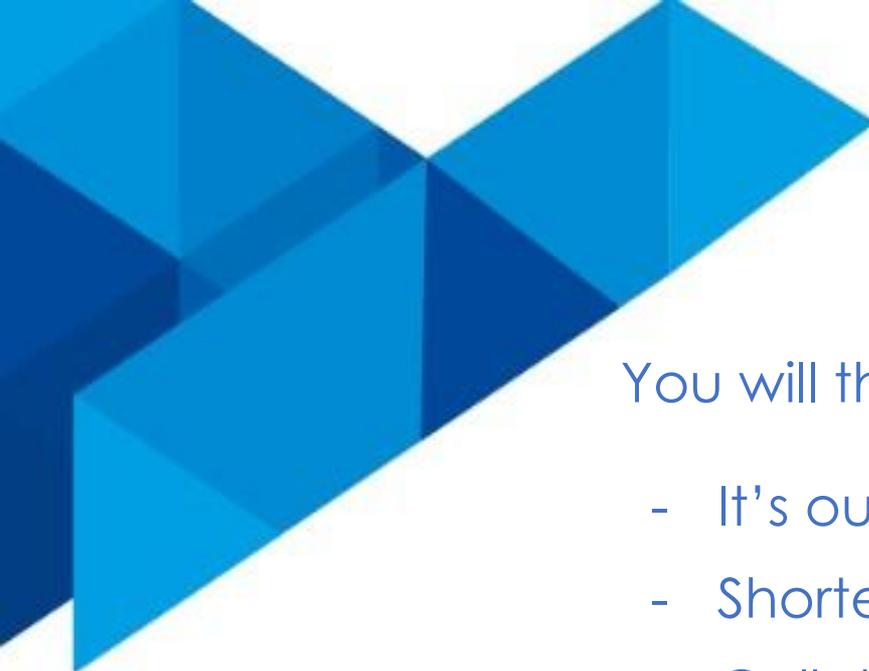
Thriving not Surviving

You will thrive at our Sixth Form.

- It's ours - we're Team Sherburn together

- Shorter days, shorter journeys

- Collaboration with TGS - range of courses

- Study support and guidance

- Period 1 mentoring twice a week

- UCAS, Apprenticeship and Employment guidance from the start of Year 12

- Oxbridge and Russell Group University guidance

- Work Experience and School Service

Sherburn High School

6TH FORM
ACHIEVE YOUR POTENTIAL

Sixth Form Facilities

- Dedicated minibus for transport to/from TGS

- Sixth Form common room

- Fussball, pool table, vending machines, TV, bluetooth speaker, guitars, Sixth Form fiction area, chess table and games

- Dedicated study rooms with PCs and group study zones

- Sixth Form lawn and picnic area

- Courtyard Garden and BBQ

- Kitchen with tea, coffee etc.

Sherburn
High School

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ACHIEVE YOUR
POTENTIAL

Thriving not Surviving

And just in case you were wondering…

Sixth Form Residential

Our current Year 12 have their sights set on an international residential for 2025-2026…

Sherburn High School

6TH FORM
ACHIEVE YOUR POTENTIAL

28th-29th NOV

Festive Edinburgh *Residential*

NON-REFUNDABLE DEPOSIT OF £50 DUE END OF JUNE, £75 BY 15TH SEPT, APPROX. £40 BY END OF SEPT.

TRAIN | APPROX. £165 | HOTEL

CASTLE | CHRISTMAS MARKETS | SHOPPING

Open to current Y12 and Y11 students joining Sixth Form in September

Feedback from Team Sherburn Families

I have to confess to being a little teary-eyed writing this as our journey at Sherburn High comes to a close.

She has had a very happy and rich experience and been very lucky to have been taught by some fabulous teachers, who have not only invested time and effort into her academic development but shown genuine and obvious care and love for her.

As a parent this means so, so much and is precious.

Sherburn
High School

6TH FORM
ACHIEVE YOUR POTENTIAL

Thriving not Surviving

In less than three years time, you will be our A Level Class of 2027…

- What will you have contributed to Team Sherburn?
- How will you have been a role model?
- What work experience will you have done?
- What will your CV say about you?
- Where will you be living?
- What will you be celebrating?

Your journey with us began in Year 7 and we look forward to the next chapter.

Sherburn High School
6TH FORM
ACHIEVE YOUR POTENTIAL

A Level Class of 2027
Write your story…
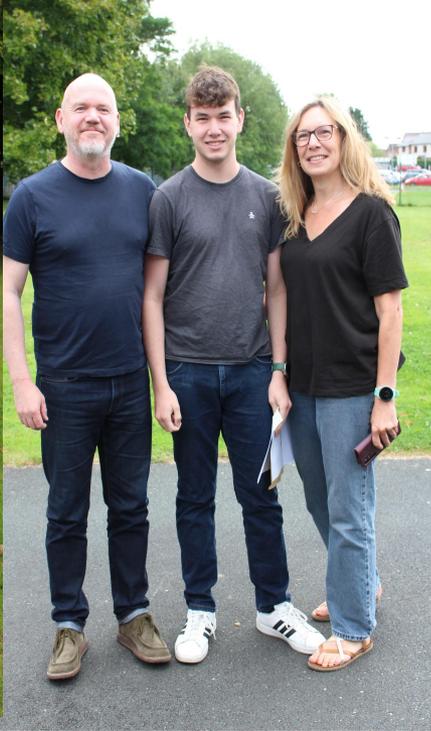
A Level Celebrations
Summer 2024

- A*-B 64% (New College was 58%)
- A*-C 82% (New College was 84%)
- 80% of our UCAS applicants got into their first choice
- 55% went to Russell Group Universities
- Five students into competitive apprenticeships

Sixth Form Open Evening Thursday 17th October 6:00pm-7:30pm

Sherburn High School

6TH FORM
ACHIEVE YOUR POTENTIAL

Join us in Sixth Form.

- Add your name and form to your invitation
- Return this on Open Evening to be entered in the Prize Draw for a fully paid Y11 reward trip before Christmas!

School Holidays –

Reward
Just Ahead

Thursday 21st August
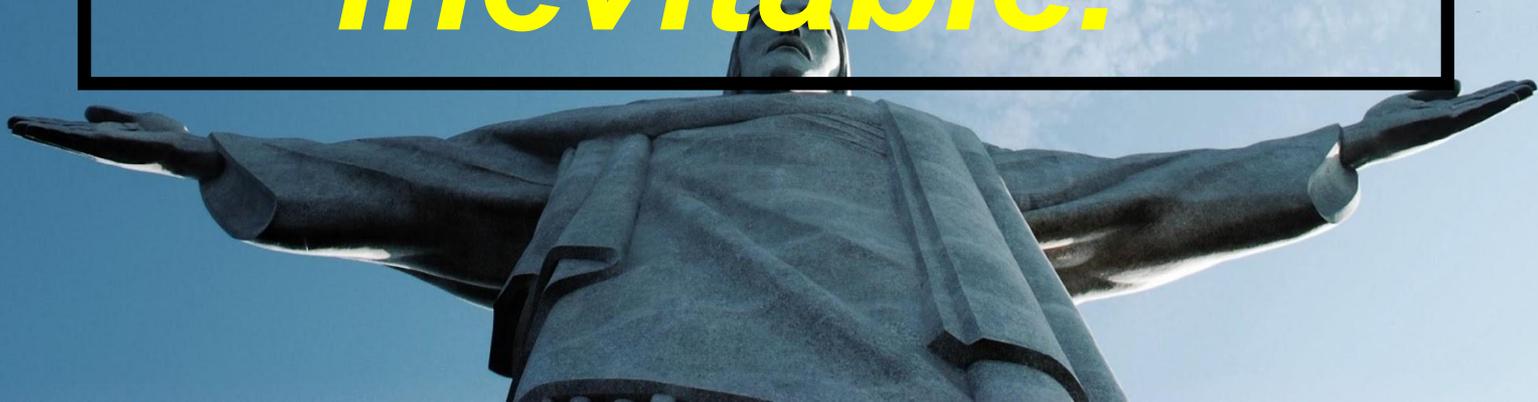
Good Luck Messages
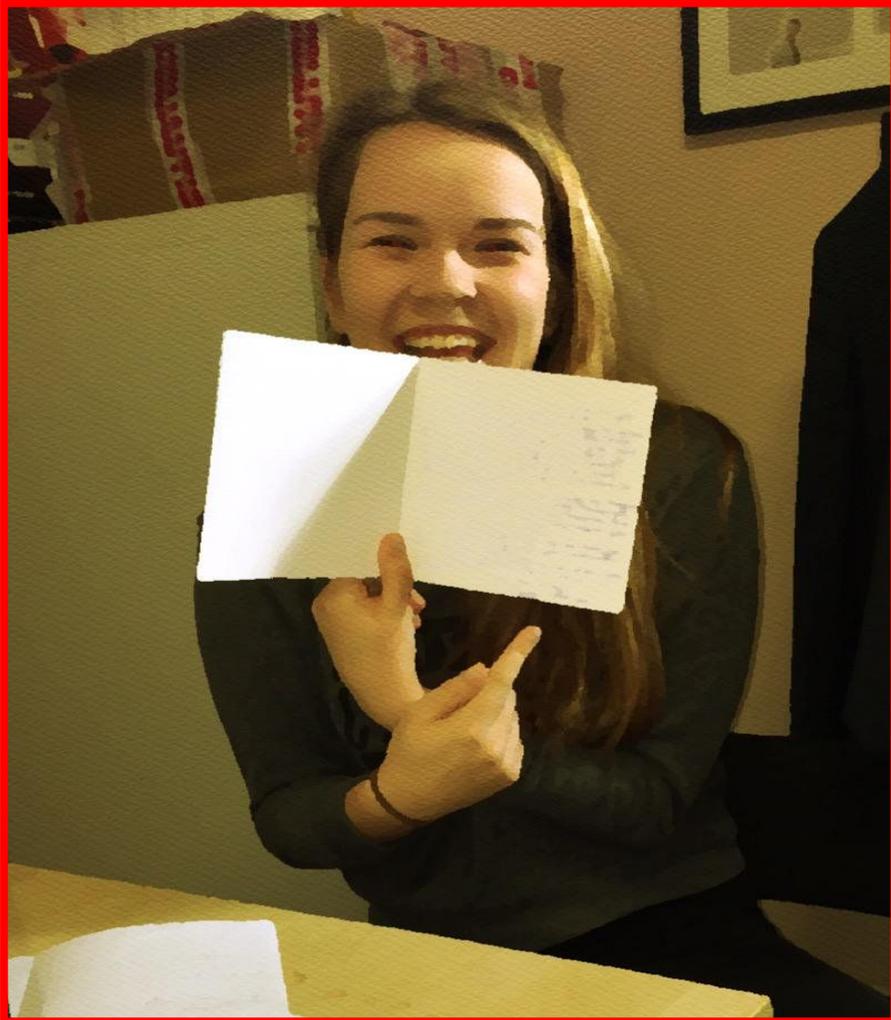
Good Luck – Cards/Emails

FAO: Mrs Makin

Needed by Wednesday 15th January

(Drop off at Progress Evening, or in school reception or via email or post)

"This is an environment where success is inevitable."

GCSE Exam boards by subject 2024 - 2025

This will help with finding suitable revision guides, past papers and resources

OCR - www.ocr.org.uk/

AQA - www.aqa.org.uk/

Pearson (Edexcel) – Pearson qualifications

Subject	Exam Board	Exam code
Art & Design	AQA	8201
Enterprise and Marketing (Business Studies)	OCR Cambridge Nationals	J837
Biology	AQA	8461
Chemistry	AQA	8462
Combined Science	AQA	8464
Computer Science	OCR	J277
Design & Technology	AQA	8552
Drama	AQA	8261
English Language	AQA	8700
English Literature	AQA	8702
French	AQA	8658
Food Nutrition and Preparation	AQA	8585
Geography	AQA	8035
History	Edexcel	1Hi0 FJ Paper 1: 1HI0/11 Paper 2: 1HI0/2J Paper 3: 1HI0/31
Health & Social Care	Edexcel BTEC	BTEC Level 2 Tech Award **603/7047/6** RHS3
Information Technology	OCR National Certificate in Creative iMedia	J834
Maths	Edexcel	1MA1 (F+H)
Music	AQA	8271
Photography	AQA	8206
Physics	AQA	8463
Theory of PE	AQA	8582
Religious Studies	AQA	8062MA
Spanish	AQA	8698
Statistics	Edexcel	1STO (F+H)
Further Maths	AQA LEVEL 2	8365