



# Maths, English and Science at Bramcote College



# Meet our Heads of English, Maths and Science

## **Emma Lee: Head of English**

- English teacher at Bramcote College for 21 years
- Head of English at Bramcote College for 9 years

## **Dom Devlin – Head of Maths**

- Maths teacher for 12 years
- Bramcote for 8 years
- Head of Maths for 6 years

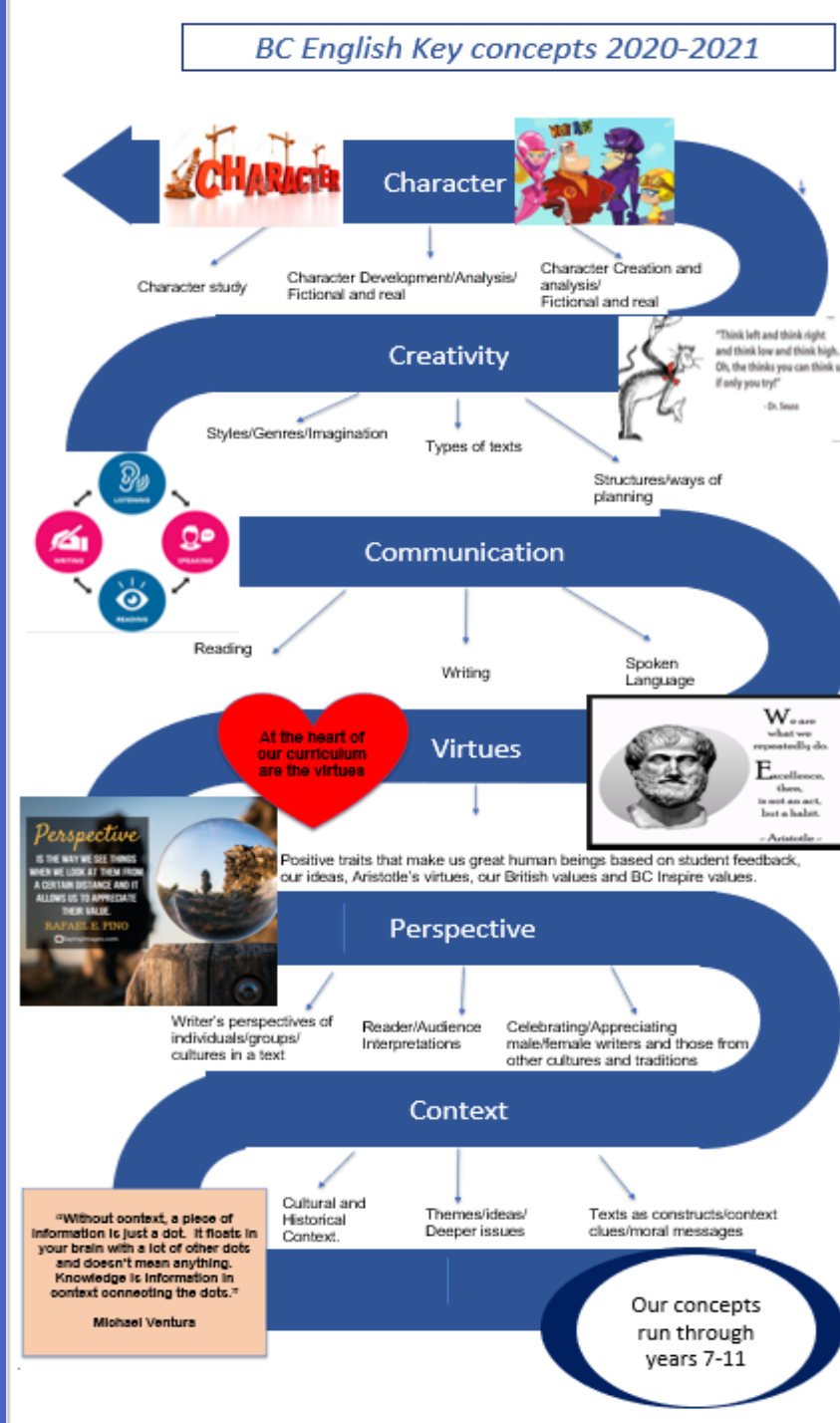
## **Alison Pascual – Head of Science**

- Science teacher for 21 years.
- Head of Science at Bramcote College for 5 years
- Staff Governor and Parent of two Bramcote College students



# English at Bramcote College

At Bramcote College we want our students to be inspired by literature of all kinds. We instil a love of literature from a broad range of perspectives and cultures, while developing a deeper appreciation of the context, themes and messages of what they are reading. We want to develop creative and analytical writers and speaker, developing the positive traits that make them great human beings.



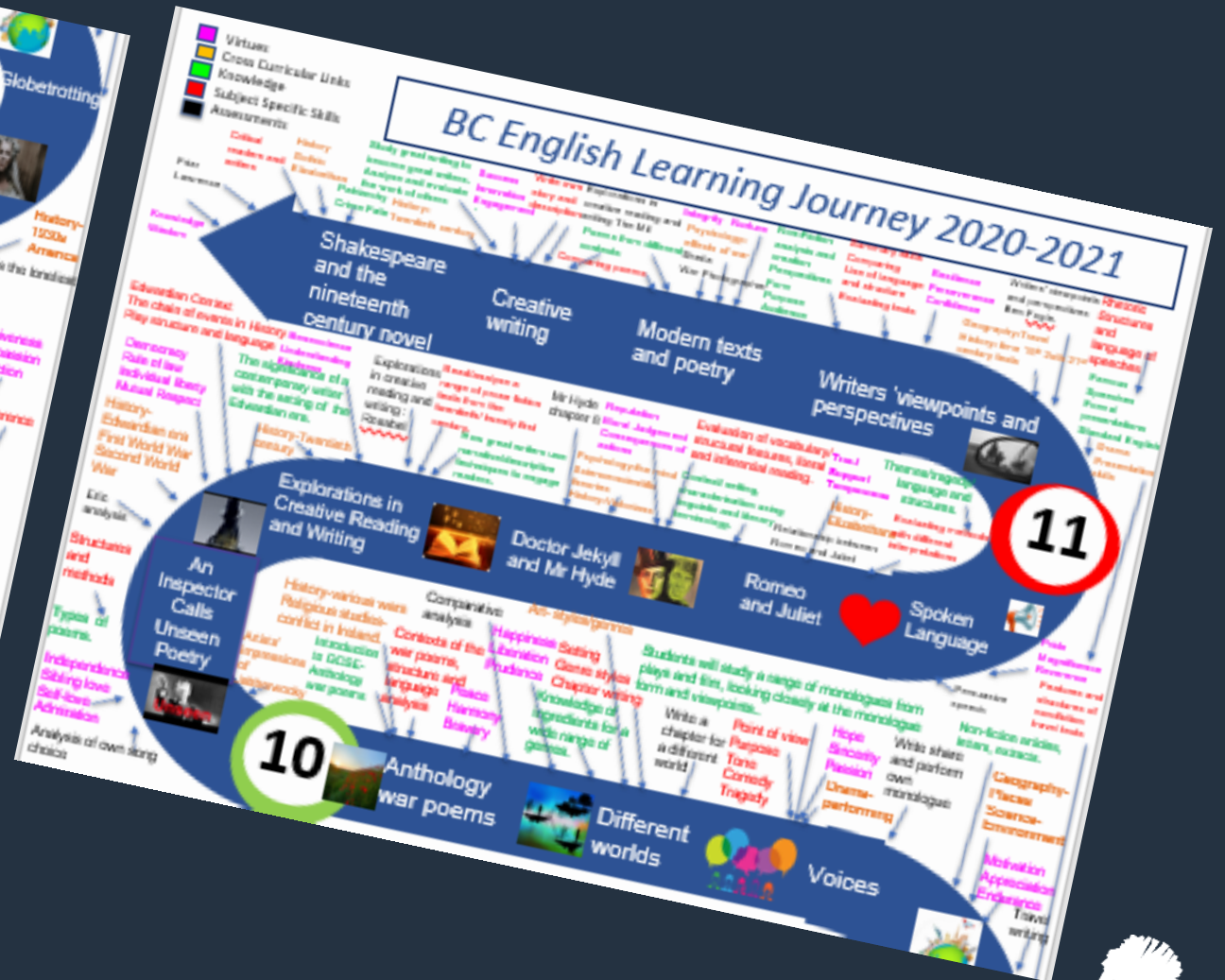
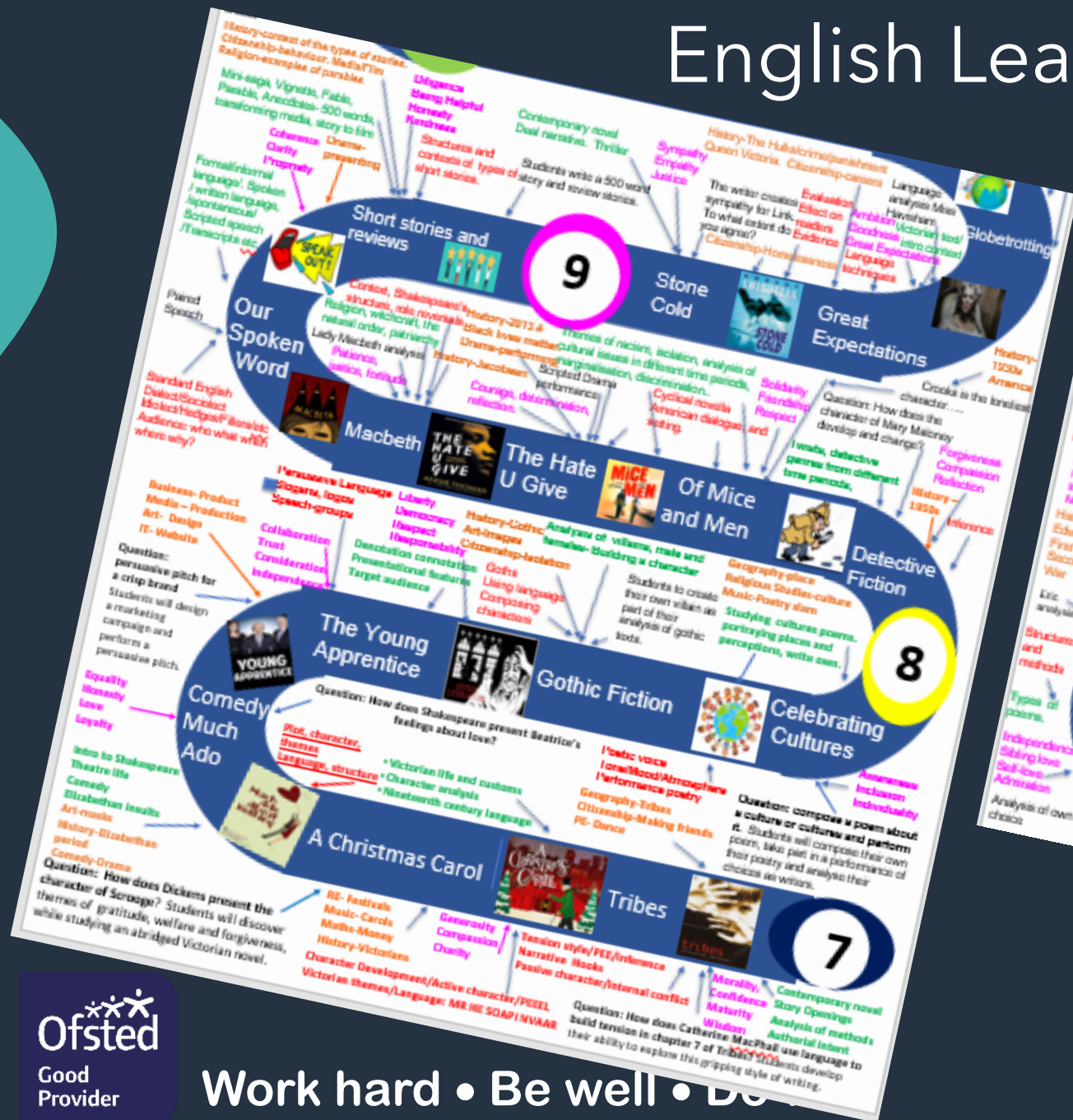


# English at Bramcote College

- **In Year 7** we focus on developing confidence, character, identity and as personal sense of morality.
- We use our 'English time machine' to travel to key periods in literary history to explore these virtues, covering contemporary, Elizabethan, Victorian and Gothic texts.
- We also develop an understanding of a range of genres and styles in literature including a focus on character writing concentrating on villains and outsiders.
- Year 7 also explores culture, individuality and freedom of expression in poetry.
- The Young Apprentice in Year 7 allows students to develop their persuasive writing and speaking skills to create the entrepreneurs of the future and to allow us to incorporate media and IT skills as well as developing design and problem-solving skills.



# English Learning Journey





# English at Bramcote College

## Reading Highlights KS3

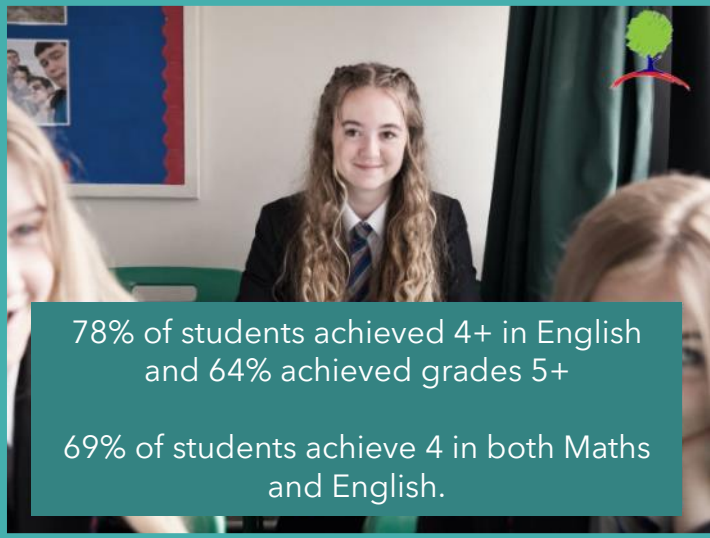
- A Christmas Carol – Dickens
- Tribes – Catherine McPhail
- Much Ado About Nothing – Shakespeare
- Lamb to the Slaughter – Roald Dahl
- Of Mice and Men – John Steinbeck
- The Hate You Give – Angie Thomas
- Macbeth – Shakespeare
- Stone Cold – Robert Swindells
- Great Expectations (extracts) – Dickens
- The Speckled Band – Sir Arthur Conan Doyle
- Gothic Fiction – extracts from classics Frankenstein and Dracula

## Skills focus

- Characterisation
- The Spoken Word
- Language development
- Persuasive and passionate speaking
- Context
- Plot twists and circular structures
- A broad range of voices
- Short story writing
- Experiencing a range of cultures
- Travel writing
- National Short Story Competition



# GCSE English at Bramcote College



78% of students achieved 4+ in English  
and 64% achieved grades 5+

69% of students achieve 4 in both Maths  
and English.

A significant number of  
students go on to study A  
Level English Language and  
English Literature and Media  
Studies at Bramcote College  
6<sup>th</sup> Form and beyond

Exam Board: AQA

- **Texts include:** An Inspector Calls by J B Priestley,  
The Strange Case of Dr Jekyll & Mr Hyde by Robert  
Louis Stevenson, Romeo & Juliet by Shakespeare.  
Power and Conflict poetry focus.

We aim to develop a love of literature genres and  
engage students in the beauty of creative writing.  
As critics, students will develop well argued  
responses and literary criticism. Students will also  
develop linguistic conventions for reading, writing  
and spoken language, developing a knowledge of  
social, historical and cultural context, as well as  
grammatic terminology and developing a broad  
vocabulary.



**Work hard • Be well • Do well**

**Ofsted**  
Good  
Provider



# English enrichment at Bramcote College

- BBC Young News Reporter
- Theatre Trips – Dr Jekyll & Mr Hyde, Romeo & Juliet (Live from the Globe)
- Poetry Live
- Script Writing Competition – University of Nottingham
- BBC National Short Story Award
- Carnegie and the Brilliant Book Award





# Maths at Bramcote College

Our aim for Maths at Bramcote College is

- Developing a deeper understanding and love for the subject which gives students the confidence to tackle the challenges of Maths.
- We foster an inquisitive approach to problem solving, allowing students to explore a range of mathematical ideas in a supportive and encouraging environment.
- Maths is a popular subject which many students choose to go on to study at A Level and beyond, opening doors to a broad range of careers.



# Year 7

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	October Half term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Xmas Holidays
Place value, addition and subtraction (with algebra and applications)						AQA test 1		Place value, multiplication and division (with algebra and application)							
Xmas Holidays	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Feb Half Term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Easter Holidays	Easter Holidays
	Geometry					AQA test 2		Factors and Multiples Fractions							
Week 1	Week 2	Week 3	Week 4	Week 5	May Half Term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8		
BIDMAS, Substitution and Linear Graphs							Percentages			AQA test 3	Statistical Tools				



# Our Learning Journey in Maths

Year Group	7	8	9
Half term 1	<ol style="list-style-type: none"> <li>1. Place Value, Addition, Subtraction</li> <li>2. Algebraic Applications (+/-)</li> <li>3. Perimeter</li> </ol>	<ol style="list-style-type: none"> <li>1. Properties of Number</li> <li>2. Adding and Subtracting Fractions</li> <li>3. Algebra Review</li> </ol>	<ol style="list-style-type: none"> <li>1. Integers</li> <li>2. Fractions</li> <li>3. Decimals</li> </ol>
Half term 2	<ol style="list-style-type: none"> <li>1. Multiplication and Division</li> <li>2. Algebraic Applications (<math>\times/\div</math>)</li> <li>3. Area</li> </ol>	<ol style="list-style-type: none"> <li>1. Constructing and solving Equations</li> <li>2. Changing the Subject of a Formula</li> <li>3. Arithmetic and Geometric Sequences</li> </ol>	<ol style="list-style-type: none"> <li>1. Algebra Review</li> <li>2. Powers and Roots</li> <li>3. Further Algebra</li> </ol>
Half term 3	<ol style="list-style-type: none"> <li>1. Calculator Skills</li> <li>2. Angles</li> <li>3. Constructions and Loci</li> </ol>	<ol style="list-style-type: none"> <li>1. Area</li> <li>2. Volume</li> <li>3. Circle Geometry</li> </ol>	<ol style="list-style-type: none"> <li>1. Solving Equations</li> <li>2. Linear Graphs</li> <li>3. Speed, Distance, Time</li> </ol>
Half term 4	<ol style="list-style-type: none"> <li>1. Factors and Multiples</li> <li>2. Equivalent Fractions</li> <li>3. Working with Fractions</li> </ol>	<ol style="list-style-type: none"> <li>1. Pythagoras</li> <li>2. Angles on Parallel lines</li> <li>3. Angles in Polygons</li> </ol>	<ol style="list-style-type: none"> <li>1. Angles</li> <li>2. Perimeter</li> <li>3. Area</li> </ol>
Half term 5	<ol style="list-style-type: none"> <li>1. Algebra: BIDMAS and Substitution</li> <li>2. Plotting Co-ordinates and Graphs</li> <li>3. Linear Graphs</li> </ol>	<ol style="list-style-type: none"> <li>1. Ratio</li> <li>2. Proportion</li> <li>3. Speed, Distance, Time</li> </ol>	<ol style="list-style-type: none"> <li>1. Percentages</li> <li>2. Standard Form</li> </ol>
Half term 6	<ol style="list-style-type: none"> <li>1. Convert Fractions, Decimals and Percentages</li> <li>2. Working with Percentages</li> <li>3. Statistical Diagrams</li> </ol>	<ol style="list-style-type: none"> <li>1. Probability</li> <li>2. Statistics</li> <li>3. Transformations</li> </ol>	<ol style="list-style-type: none"> <li>1. Summary Statistics</li> <li>2. Statistical Diagrams 1</li> <li>3. Statistical Diagrams 2</li> </ol>



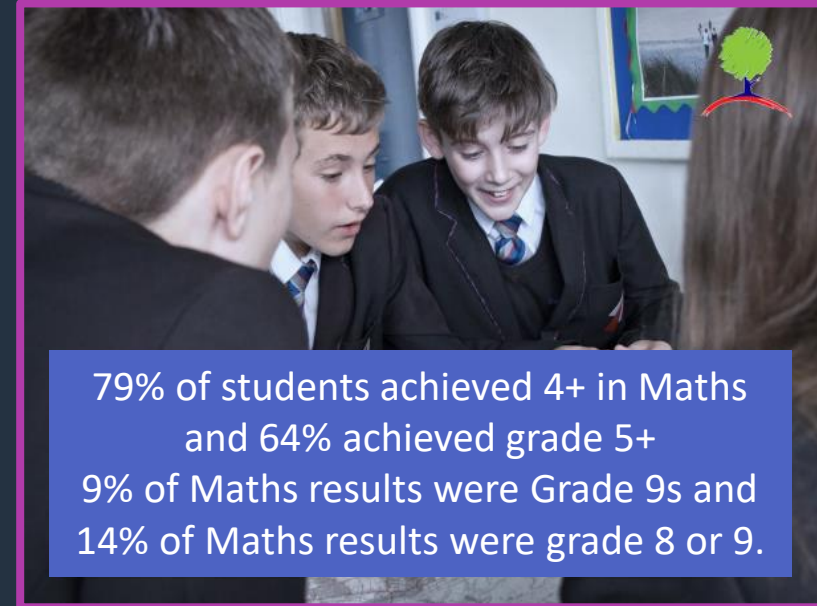
Work hard • Be well • Do well





# From KS3 to GCSE

Year Group	10F	10H	11F	11H
Half term 1	<ol style="list-style-type: none"> <li>Sequences</li> <li>Equations</li> <li>Sim Equations</li> </ol>	<ol style="list-style-type: none"> <li>Sequences</li> <li>Quadratic Equations</li> <li>Sim Equations</li> </ol>	<ol style="list-style-type: none"> <li>Algebraic Manipulation</li> <li>Linear Graphs</li> <li>Percentages and Interest</li> </ol>	<ol style="list-style-type: none"> <li>Algebraic Manipulation</li> <li>Circles</li> <li>Growth and Decay</li> </ol>
Half term 2	<ol style="list-style-type: none"> <li>Properties of Number</li> <li>Probability</li> <li>Formulae</li> </ol>	<ol style="list-style-type: none"> <li>Surds</li> <li>Probability</li> <li>Formulae</li> </ol>	<ol style="list-style-type: none"> <li>Interpreting Graphs</li> <li>Transformations</li> <li>Similarity and Congruence</li> <li>Constructions and Loci</li> </ol>	<ol style="list-style-type: none"> <li>Interpreting Graphs</li> <li>Transformations</li> <li>Similarity and Congruence</li> <li>Constructions and Loci</li> </ol>
Half term 3	<ol style="list-style-type: none"> <li>Pythagoras</li> <li>Right Angled Trigonometry</li> </ol>	<ol style="list-style-type: none"> <li>Functions</li> <li>Pythagoras</li> <li>Right Angled Trigonometry</li> </ol>	<ol style="list-style-type: none"> <li>Pythagoras (Repeat)</li> <li>Trigonometry (Repeat)</li> <li>Graphs of other functions and equations</li> </ol>	<ol style="list-style-type: none"> <li>Further Trigonometry</li> <li>Graphs of other functions and equations</li> </ol>
Half term 4	<ol style="list-style-type: none"> <li>3D Objects</li> <li>Volume, Surface Area, Density</li> </ol>	<ol style="list-style-type: none"> <li>3D Objects</li> <li>Volume, Surface Area, Density</li> </ol>	<ol style="list-style-type: none"> <li>Vector Geometry</li> <li>Revision</li> </ol>	<ol style="list-style-type: none"> <li>Vector Geometry</li> <li>Transformations of Curves</li> </ol>
Half term 5	<ol style="list-style-type: none"> <li>Ratio</li> <li>Proportion</li> </ol>	<ol style="list-style-type: none"> <li>Ratio</li> <li>Proportion</li> </ol>	Given over to Revision and Exams	Given over to Revision and Exams
Half term 6	<ol style="list-style-type: none"> <li>Graphs Revisited</li> <li>Inequalities</li> </ol>	<ol style="list-style-type: none"> <li>Graphs of Linear and quadratic Functions</li> <li>Inequalities</li> </ol>		



# Enrichment, stretch & challenge in Maths at Bramcote College

- We have successfully entered students for the UKMT (UK Mathematical Trust) challenges at Junior, Senior and Intermediate levels starting in Year 7 and progressing into 6<sup>th</sup> Form. Students have achieved bronze, silver and gold certificates and progressed to further competitions including the Kangaroo and Mathematical Olympiad.
- We have a dedicated Maths TA who runs small groups focussing on both accelerating and supporting students with pre-teaching and preparation in specific areas.
- GCSE Further Maths for the most able mathematicians.
- High uptake in A Level Maths and Further Maths at Bramcote College 6<sup>th</sup> Form and beyond.



# Science at Bramcote College

At Bramcote College we deliver an inspiring and relevant science curriculum preparing our students for a society where science and innovation is at the forefront of technological developments.

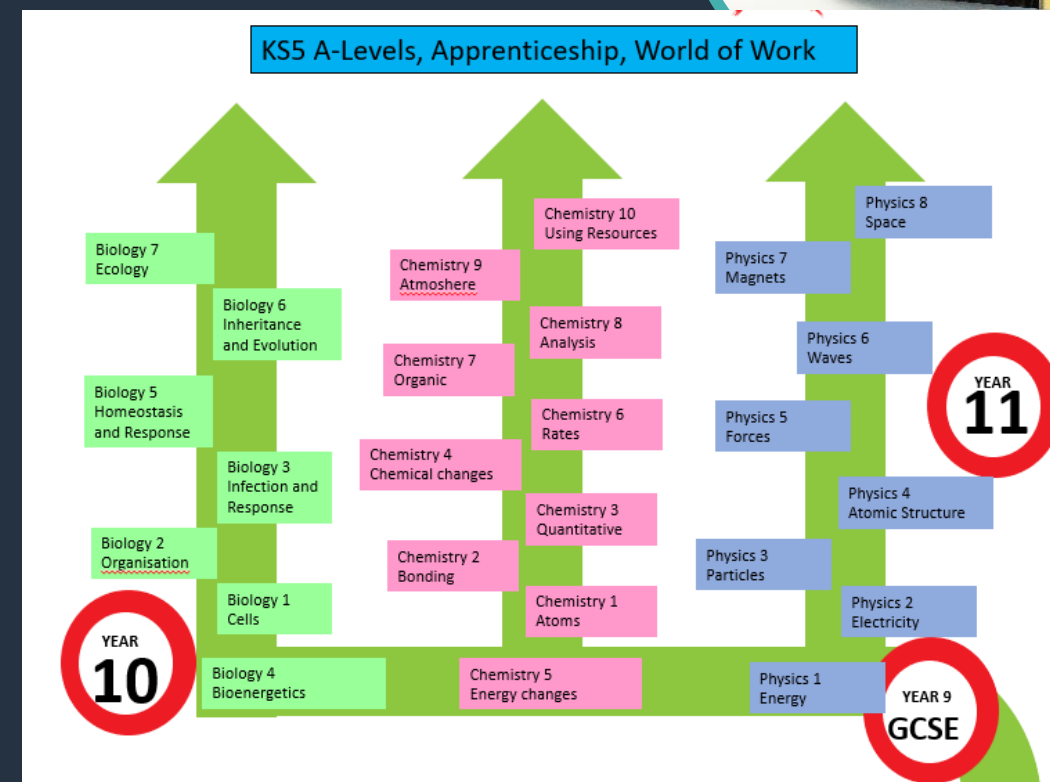
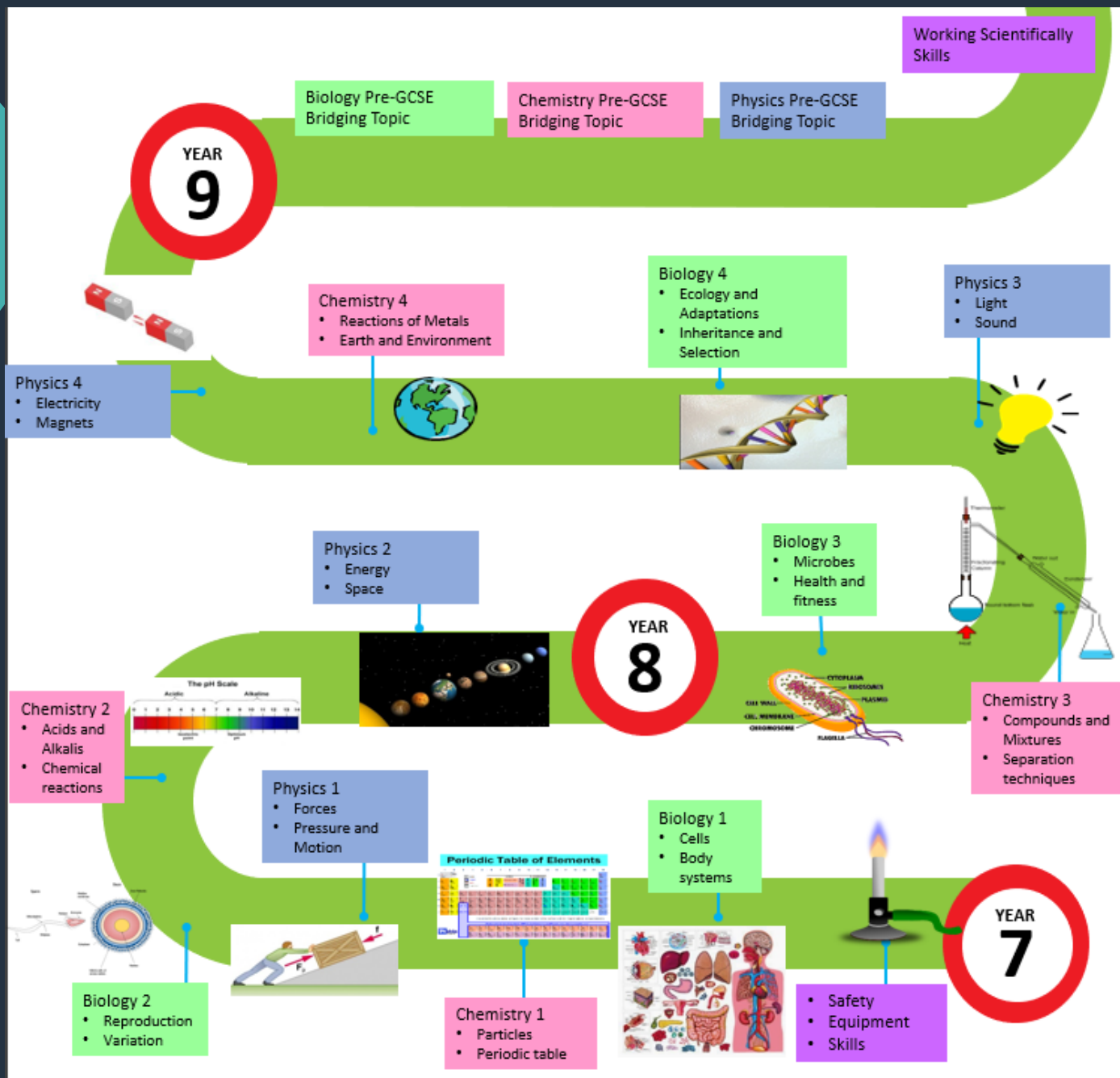
Our curriculum is delivered within a nurturing environment founded on strong relationships between our staff and students. The curriculum across all key stages and disciplines is designed to engage, enthuse and challenge through development of skills in research, investigation, analysis and evaluation.

We want our students to become curious, independent, confident thinkers who will persevere until they are successful at solving the most challenging problems.

Our science curriculum allows our students many opportunities to consider their responsibilities within the wider world, enabling them to reflect on the ethical and moral issues associated with scientific progression, considering multiple viewpoints and expressing their own opinions with confidence and integrity.

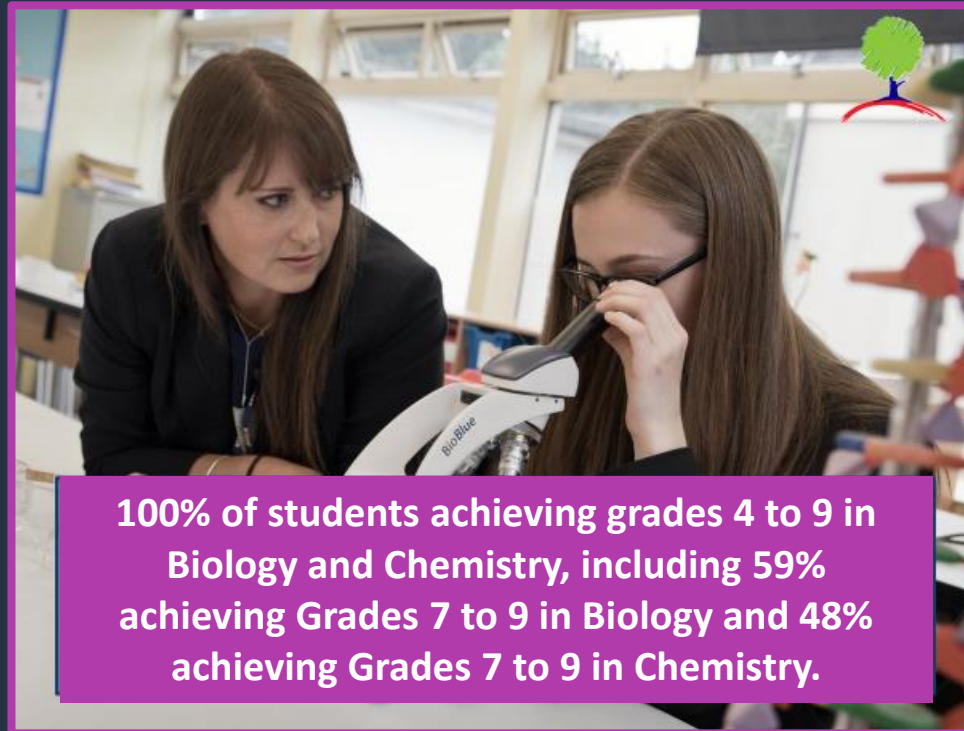






# Science develops skills in...

- Research
- Analysis and Evaluation
- Problem solving
- Critical thinking
- Literacy and numeracy



# Y7 Science at Bramcote College

Unit	Topics	6 x Reading Assessment Peer, Self-Assessed	6 X PIN Extended Writing Teacher assessed	6 X Unit tests Teacher assessed	HSW - Key Investigation Work and Skills
Biology	Cells + Body Systems	Joints	Specialised Cells	1 per half-term  Recorded on Go4schools  Target tackling exercises completed afterwards	Microscopes Food Tests Model Gut Flower Dissection Variation in the class
	Reproduction + Variation	Frog Reproduction	Key Design		
Chemistry	Particles and Periodic Table	Dmitri Mendeleev Birthday	Particle Model		Stearic Acid Cooling Curves Diffusion Group 1 Metals Indicators Neutralisation Antacid investigation. Exo/Endo Combustion
	Acids and Reactions	Endo/Exo	Acids and Alkalis		
Physics	Forces + Motion	Speed Records	Floating and Sinking		Helicopters Friction Hooke's Law Density Gas Pressure Conduction & Convection Energy in Fuels
	Energy + Space	Moons	Heating the home		





# GCSE Science at Bramcote College

Exam Board: AQA

- Trilogy Science ... students are taught all three sciences and gain two Science GCSE grades at the end of the course.
- Triple Science ... designed for students who want to do A-Levels in Science and are thinking of a science-based career. Students are taught all three sciences (but with additional content compared with the Trilogy course). Students will gain a grade in Biology, Chemistry and Physics at the end of the course.
- In 2022 our Science results saw 100% of students achieving grades 4 to 9 in Biology and Chemistry, including 59% achieving Grades 7 to 9 in Biology and 48% achieving Grades 7 to 9 in Chemistry.
- A-Level Biology, Chemistry and Physics are some of the most popular subjects in our 6th form. We run two Biology A Level classes each year and one each of Physics and Chemistry.
- Our A-level Science students have gone on to University to study subjects such as The University of Nottingham, Exeter University and Liverpool University.



# Enrichment in Science

- STEM activities
- Salters festival of Chemistry
- Go4Set Engineering project
- i Rail workshops
- Engineering extravaganza
- Space Centre
- Portugal Ecology Field Study Trip (A-Level)

