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[www.arleneducation.com](http://www.arleneducation.com)

# Arlen Summer School 2021

# Who are we?

Our passion is for learning and enabling our students to achieve their scholastic ambitions. Whether we help our students by connecting them with one of our expert, professionally verified tutors or by enrolling them onto one of our very own courses, we remain dedicated to educational growth in all forms.

Each tutor has been vetted to the highest standard, and our platform allows anybody to find and book the right tuition for them. Our online tuition school, Arlen Academy, now runs over 200 classes per month through Tutor Finder and we are committed to growing this even further in order to provide the highest quality of education to as many students as possible.

Our Summer School classes are intended to help students maintain momentum over the summer months so that they have a flying start when they return to school in September. For some students, these classes will also be the ideal opportunity to catch up on any missed education as a result of the last 12 months of disruption.

# Arlen Online

Our bespoke online platform allows students to access resources for their classes before and after lessons, providing an ideal revision platform as well as being a one-stop platform for their courses.

**My Courses**

Course Name	Starts	Ends	Progress	Q & A
ARCHIVED 2019- 2020..	28 Apr 2020	31 Jul 2021	2%	0
KS5 - Yr 13 - Biolog..	9 Sep 2020	31 Jul 2021	0%	0
KS5 - Yr 13 - Chemis..	7 Sep 2020	31 Jul 2021	0%	0

[View All](#)

**Latest Content**

Name	Course Name	Content	Q & A
12.05.2021	Sherlaynne - Maths -..	1 items	0
05.05.2021	Sherlaynne - Maths -..	1 items	0
28.04.2021	Sherlaynne - Maths -..	1 items	0

**Announcements**

No announcement found

**Events**

- Apr 27 11:30 am 27.04.21 French- Florence [VIEW MORE](#)
- Apr 27 5:15 pm 27.04.21 Yr 12 English - .. [VIEW MORE](#)

**Calendar**

APRIL 2021

# Timetable

Dates and times for each course will be finalised to accommodate the timetables of individual students.

If you are interested in one or multiple courses, please register your interest with us and we will then work with all registered students to create a full timetable. Parents or carers booking multiple courses will receive a booking discount.



# Summer Lessons

## Year 6 to Year 7 Booster Classes

The jump from year 6 to year 7 represents a significant step-up in terms of academic rigour for students, especially considering the difficulties of the past 12 months. Our booster classes will prepare students for the leap to middle school, ensuring that they have sound knowledge and the relevant exam skills to succeed. Currently, we have the following booster classes available, starting from July 2021:

- English
- Maths
- Science

## Head-Start to GCSE Classes

Our head-start to GCSE classes offer students the opportunity to ensure that they have solid foundations in their subject knowledge while will allow them success in their GCSEs. These courses will prepare students for the rigours of the GCSE and allow any potential knowledge gaps to be filled to avoid any greater problems at a later stage. We will also ensure that an overview of GCSE content is provided in each lesson, as well as a focus upon exam skills so that students truly have a head-start when they return to school in September.

- English
- Maths
- Science

## Head-Start to A Level Classes

For GCSE students who are moving onto their A levels, many may be facing knowledge gaps after a disrupted year of education and for those who have managed to continue their studies without any gaps there may be a lack of exam skills which will hinder their progress at this higher level of education. Our head-start to A Level classes will ensure that students have solid knowledge of the GCSE specification, so that they can build on this at A-Level. We will also spend time looking at exam skills, A-Level techniques and dive into some of the more rigorous aspects of each subject.

- English Language
- English Literature
- Maths
- Chemistry
- Physics
- Biology

## Contact Us



For more information on our summer classes, or our one-to-one tuition offerings, then contact us on:

01335 388355

[enquiries@arleneducation.com](mailto:enquiries@arleneducation.com)

[www.arleneducation.com](http://www.arleneducation.com)

<https://www.facebook.com/arleneducation/>

# Year 6 to Year 7 Booster English Sessions

## Summer 2021

### Overview

This course aims to provide students with strong foundation in English writing, comprehension, and analysis before starting secondary school. A secure knowledge of the English language is essential for subjects across the curriculum, as well as being one of the core subjects assessed at KS3. Ensuring that students are fully equipped for secondary school English boosts confidence and prepares them for the challenges ahead.

Each lesson will enable students to hone their grammar, vocabulary, and creative writing techniques, and the small-group environment allows the tutor to fully support each student on an individual level. Students benefit from more personal and detailed feedback on their work, to progress quickly and confidently.

### Tutor Introduction – Vicky Harris



Vicky is an experienced tutor who specialises in English Literature and English Language. She has a real passion for these subjects and is keen for all her students to develop confidence in their abilities and realise their potential. Her love of teaching began in 2001 after moving to Barcelona to train for the CertTESOL Certificate from Trinity College London. Her first teaching job was at a private language school in South Korea, and during her subsequent years in Asia she taught civil servants in Vietnam, prepared university graduates for the IELTS examination in Indonesia, and prepared secondary students for the O-Level exam with the British Council in Singapore. Her experience working as a volunteer primary school teacher in Tanzania led to her setting up a sponsorship programme, which has successfully supported ten local children through primary and secondary school, providing school fees, textbooks and school uniform.

### Course Overview

Lesson Title	Overview
Punctuation	This session will look in depth at the cornerstone of English language: punctuation. Students will analyse how to use commas, semi-colons, apostrophes, and brackets.
Creative writing	In this session we will build upon our analysis of punctuation by applying it in our own creative writing. Students will analyse examples of creative writing, before then planning their own story.
Reading comprehension	In this session we will hone our comprehension skills by reading a variety of different texts, both fiction and non-fiction, and then answering a series of questions about the texts.
Different forms of poetry	In this session we will look at different forms of poetry – from limericks to free verse poems. Students will analyse how poems are structured and write their own examples.
Formal and Persuasive Writing	Combining the skills learned in the previous sessions, students will be challenged with incorporating persuasive techniques into their own writing. Students will also practice letter structure and writing in a formal style.

# Year 6 to Year 7 Booster Maths Sessions

## Summer 2021

### Overview

This course aims to provide students with strong foundation in Mathematics before starting secondary school. Maths is one of the core subjects assessed at KS3, so a head start for the more challenging work in Year 7 ensures that they remain ahead of the curve throughout their secondary school career.

As well as ensuring that concepts which are taught in the school environment are thoroughly understood by students, they will also be given a greater depth of knowledge for each of the topics covered. Each lesson will enable students to hone their Maths skills, and the small-group environment allows the tutor to gain a fully rounded understanding of each students' requirements.

### Tutor Introduction – Abi Bilton



Abi is an experienced tutor who specialises in science and maths. She is enthusiastic and is always looking for new ways to make her lessons fun. Her previous experience as a fun science presenter in primary schools has provided her with the training to provide fun and engaging science sessions which keeps the children both entertained and interested

Abi studied at the University of Bristol, before working for the Aerospace Company Airbus. During her time in the Chief Engineer's department, she volunteered as Education Outreach Representative for Airbus. Abi helped to organise and coordinate many science and technology events at Airbus and at schools, including the UK Robot Challenge Finals and The Big Bang Science Fair.

### Course Overview

Lesson Title	Overview
Algebra	This session will introduce the concepts of algebra. We will look at how to use algebraic expressions, with students both forming and solving algebraic equations.
Number	This session recaps the fundamentals of fractions, decimals and percentages, extending the student's knowledge to reverse percentages, word problems, and conversions.
Ratio and proportion	In this session we will look at ratio and proportion, with students learning how to calculate ratio using real-world examples, such as adapting ingredients in a recipe.
Probability	In this session we will learn about probability, and the different types of questions that can be asked based on probability - from single events to multiple events and Venn diagrams.
Shape, space and measures	In this session we will look at the key aspects of shape, space and measures; analysing transformations, symmetry and how to calculate perimeter, area and volume.

# Year 6 to Year 7 Booster Science Sessions

## Summer 2021

### Overview

This course aims to provide students with essential concepts and principles in science before starting secondary school. The course will cover topics across Biology, Chemistry and Physics for a well-rounded understanding across the curriculum. Science is one of the core subjects assessed at KS3, and a strong understanding before secondary school enables students to start their secondary school career with the best possible head start.

Each lesson will enable students to expand their current scientific knowledge, as well as learning practical skills such as designing an experiment and handling data. The small-group environment allows the tutor to fully support each student on an individual level. Students benefit from more personal and detailed feedback on their work, to progress quickly and confidently.

### Tutor Introduction – Abi Bilton



Abi is an experienced tutor who specialises in science and maths. She is enthusiastic and is always looking for new ways to make her lessons fun. Her previous experience as a fun science presenter in primary schools has provided her with the training to provide fun and engaging science sessions which keeps the children both entertained and interested

Abi studied at the University of Bristol, before working for the Aerospace Company Airbus. During her time in the Chief Engineer's department, she volunteered as Education Outreach Representative for Airbus. Abi helped to organise and coordinate many science and technology events at Airbus and at schools, including the UK Robot Challenge Finals and The Big Bang Science Fair.

### Course Overview

Lesson Title	Overview
Atomic structure	An essential concept in all sciences, this session focusses on the structure of atoms, and how they form every material in the world around us. Students discover how atoms can bond together to form new materials and discuss some applications of different elements.
Properties of metals and non-metals	In this session, students build on their knowledge of metals and non-metals, including conductivity, strength, and density. Students how these properties link to the structure of the material and learn some basic reactions of metals.
Forces and Motion	This session moves onto the wider principles of physics, including forces and motion. Students learn how forces can cause objects to move or change shape and learn how to use some simple equations to calculate some forces.
Human Biology	This session is jam-packed with interesting facts about the human body, covering some basic systems such as breathing, circulation and digestion. Students benefit from a recap of cells, tissues and organs, and apply principles of diffusion.
Ecology, Environment and Plants	Turning now to the plant and animal world, this session takes students through how the ecosystem thrives, investigating some abiotic and symbiotic factors. The lesson then leads to the human impact on the environment, as well as studying photosynthesis and the structure of plants.

# Head-Start to GCSE Maths Sessions

## Summer 2021

### Overview

Our Head-Start courses are designed to help students prepare for the transition between KS3 and GCSE. The GCSE years are very demanding, with learning all the GCSE course content, so these booster session over the summer prepare students for the more academically rigorous GCSE Mathematics course.

These sessions are designed to reinforce the fundamentals taught at KS3 and bridge the gap to GCSE by supporting students on a personal level. The tutor builds and extends their current knowledge to succeed at more challenging questions they will encounter at GCSE. The tutor will work with each student individually within the small group setting to maximise the benefit of the classes.

### Tutor Introduction – Kara Niven



Kara graduated from Imperial College having obtained a MSci in Physics. She embarked on 18 months of travel before being employed on a graduate scheme learning computer programming. After four years in this career Kara had the opportunity to move to Chicago, USA, where she had a few temporary jobs before settling to work for an organisation that promoted health and fitness for girls. This sparked a passion for working with young people and on returning to the UK in 2010 Kara started working as a teaching assistant before deciding to train to teach mathematics.

Kara trained as a maths teacher in 2011 through the Graduate Teaching Programme at Landau Forte College and the University of Nottingham. She has since taught mathematics at KS3, GCSE and A Level. She is currently an examiner for Pearson for A level mathematics, providing a unique insight into exam techniques and common errors.

### Course Overview

Lesson Title	Overview
Geometry	In this session we will look at the key aspects of shape and measures; analysing transformations, symmetry and how to calculate perimeter, area and volume of more complex shapes, including similar shapes.
Number	This session recaps fractions, decimals and percentages, extending the student's knowledge to reverse percentages and advanced word problems, as well as standard form and significant figures.
Data Handling	Data handling is an essential skill for not only Maths, but also Science. This session helps students with how to accurately analyse data and present the information in charts and diagrams.
Probability	In this session we will refresh the basics of probability, such as single events, and then extending the topic to cover multiple events and Venn diagrams.
Algebra	This session will develop the students' concept of algebra. We will look at how to use algebraic expressions, with students both forming and solving algebraic equations.

# Head-Start to GCSE Science Sessions

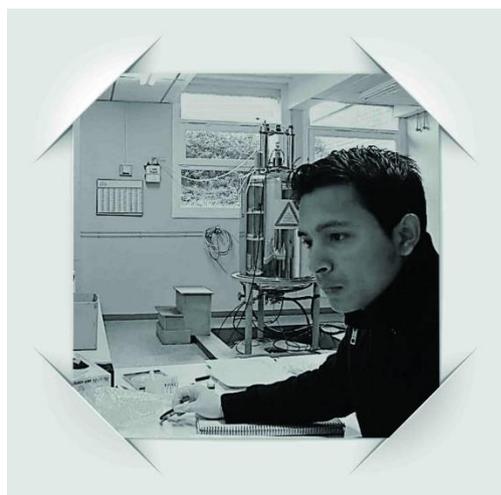
## Summer 2021

### Overview

This course aims to prepare students for the in-depth and demanding GCSE science course. We cater for both 'triple' and 'combined' science courses by focussing on developing the key skills required to carry out the practical experiments and analyse investigation data in a scientific way, as well as covering topics across Biology, Chemistry and Physics for a well-rounded understanding across the curriculum.

The small size of the class allows the tutor to fully support each student on an individual level, and students benefit from personal and thorough feedback on their work. The classes are designed to engage students in their science studies in a fun and constructive way, boosting confidence and allowing students to ask questions and explore the topics in a supporting environment before GCSE assessment.

### Tutor Introduction – Dr Prashant Rajbhandari



Prashant did Ph.D in chemistry. He has a wealth of experience in tutoring students ranging from Y13-GCSE-B-TEC and A-level for various exam boards (AQA, Edexcel and OCR boards). He has also been tutoring Inorganic and physical chemistry to graduate students. Teaching has always been his passion hence he is also doing a PGCE course at the university of Nottingham. My goal is to help you achieve yours

My key areas are chemistry, biology, physics and Maths for the students at different level. Having tutored A-level chemistry/Maths/Biology on one-to-one basis for more than 7 years, I have gained a very good knowledge of curriculum mainly for AQA, OCR and Edexcel exam boards. I have been also involved in tutoring KS3/GCSE triple science (chemistry physic sand biology) and mathematics for more than 10 years.

### Course Overview

Lesson Title	Overview
Cells and Organs	This session focusses in on the detail and systems involved with human cells and organs. Topics such as the heart, lungs, and digestive system and recapped, as well as delving deeper into the function of cells and tissues.
Atoms and Periodic Table	A common topic in both Physics and Chemistry, this session focusses on the structure of atoms, and how they form every material in the world around us. Students discover how compounds are formed, and how elements fit into the periodic table according to their properties.
Electricity and Static	This session consolidates prior knowledge of circuits and electricity, and introduces more advanced concepts such as resistance, and parallel and series circuits. The lesson ends with the phenomena of static electricity and lightning.
Immune System	Building on the topic of cells, this session focusses in on the specific cells in the immune system, and how they work together to protect the body against pathogens. This session also includes how vaccinations can eradicate diseases.
Acids and Bases	This session is all about pH, and what makes a substance acidic, or alkali. Students investigate reactions of acids and metals, metal oxides and metal carbonates, and learn how acids and bases can be used in everyday life to solve problems such as indigestion, or wasp stings.

# Head-Start to GCSE English Sessions

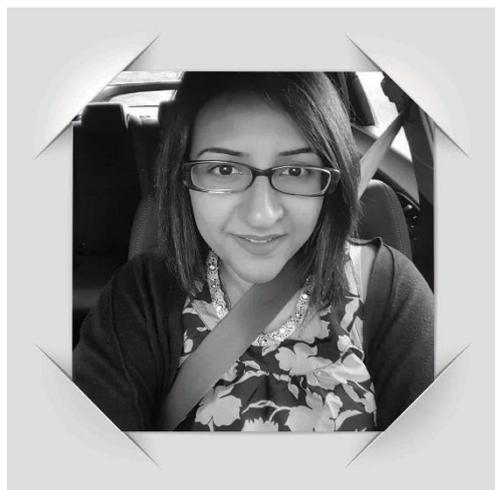
## Summer 2021

### Overview

This course aims to support students in the build-up to their GCSE English Language examinations. As well as ensuring that concepts which are taught in the school environment are thoroughly understood by students, they will also be given a greater depth of knowledge for each of the topics covered. A specific focus on exam practice, including how to respond to different questions in order to gain maximum marks, will be ever-present during lessons so that students are adequately prepared for their GCSE examinations.

The small size of the class allows the tutor to fully support each student on an individual level, and students benefit from personal and thorough feedback on their work. The classes are designed to engage students in their science studies in a fun and constructive way, boosting confidence and allowing students to ask questions and explore the topics in a supporting environment before GCSE assessment.

### Tutor Introduction – Meera Raichura



Meera has 15 years of teaching experience in both mainstream and private education. She has taught in a range of education sectors, from university, colleges and schools. She has also been an AQA examiner over the years and worked with many examining bodies including Edexcel and OCR.

She has taught in both face-to-face basis and online, one to one and in groups, in India, China and in England. I speak in 5 languages fluently and am currently learning a sixth language.

Meera is extremely passionate, dedicated and experienced tutor, that thrives for learners to reach their potential. Meera believes passionately that a student who enjoys their educational experience will gain the confidence and motivation to progress to their greatest capacity.

### Course Overview

Lesson Title	Overview
Language and structure	This session will look at the language and structures that are employed by writers in order to create effective characters, settings, plot and themes. We will look at specific techniques and how to identify them, and also how apply them independently in our own writing.
Analysing fiction and non-fiction texts	In this session we will look at how to identify whether a piece of writing is fiction or non-fiction, and the key differentiators between the two types of text. Through analysing real-world examples, students will become familiar with different categories of writing and how to approach each in an exam setting.
Identifying audience, purpose and form	In this session we will look at how to identify the specific audience that a piece of writing is aimed at, as well as the purpose. By identifying these key aspects of a piece of writing, students will be able to select the correct language techniques, tone and structure in their own writing.
Writing fiction	In this session we will look at how to write an effective and engaging piece of fiction, building on our analysis of these types of text earlier in the block and allowing students to express some creativity. We will analyse engaging narrative openings in order to inspire students to write more freely.

# Head-Start to A-Level Biology Sessions

## Summer 2021

### Overview

Our Head-Start courses are designed to help ease the difficult transition between GCSE and A-level. Even top performing students find the jump challenging, so join our summer sessions to build your confidence and prepare for September.

Biology A-level is a demanding course and full of new systems and processes to learn. These sessions are designed to reinforce the fundamentals from the GCSE course in both Human Biology, and Plants & Ecology, as well as starting to introduce some content from the AS. The small group setting allows the tutor to work individually with students on a personal level to further understanding and boost confidence.

### Tutor Introduction – Dr Claire Flux

Dr Claire teaches Biology, Chemistry and Physics at Key Stages 3 and 4 and Biology at Key Stage 5 and has over 15 years of classroom experience in addition to over 10 years of small group/one to one tutoring experience.

She has a proven track record with her students consistently achieving at or above their target grades. Claire's current school is rated outstanding by Ofsted and has specialist Science and Maths status, with these subjects being regarded as particular strengths of the school. In addition to teaching a full timetable of Science lessons, Dr Claire is a Sixth Form personal tutor, a role that involves providing support to 20-25 A level students applying for university courses, including writing UCAS references and advising on personal statements.

She has an extensive subject knowledge across all three Science subjects and the benefit of 4 years of academic research experience which she brings to her teaching and tutoring. She focuses especially on exam technique for students undertaking public examinations, in addition to reinforcing their understanding and recall. For students learning new topics she fosters a collaborative environment, encouraging students to work together and talk about theories.

### Course Overview

Lesson Title	Overview
Cells	This session consolidates students' current knowledge of cell organelles, as well as introducing new organelles such as the Golgi body, endoplasmic reticulum, and nucleolus.
Biological Molecules	Building on the previous session, this session focusses student's attention on the structure and function of each of the fundamental biological molecules, such as lipids, proteins and complex carbohydrates.
Proteins	This session delves deeper in the different types and structures of proteins, developing students' knowledge of enzymes, DNA and polypeptides.
Transport in Cells	Both plants and humans require transport of substances in and out of cells, and this topic introduces students to some of the important cellular processes which are vital for life.
Genetics	This session refreshes students' knowledge of the structure of DNA, and introduces the topic of transcription and translation in the ribosomes for protein synthesis.

# Head-Start to A-Level English Sessions

## Summer 2021

### Overview

Our Head-Start courses are designed to help ease the difficult transition between GCSE and A-level. Even top performing students find the jump challenging, so join our summer sessions to build your confidence and prepare for September.

This course aims to support students in the build-up to their A level English Language examinations. As well as ensuring that concepts which are taught in the school environment are thoroughly understood by students, they will also be given a greater depth of knowledge for each of the topics covered. A specific focus on exam practice, including how to respond to different questions in order to gain maximum marks, will be ever-present during lessons so that students are adequately prepared for their A level examinations.

### Tutor Introduction – Dr Helen Bailey



Helen is a highly experienced and dedicated tutor with an infectious enthusiasm for literature and learning. She will work with clients on an individual basis to build their confidence, boost their independent learning and research skills, and encourage analytical and connective thinking that will help them to achieve their full potential.

She holds a PhD in English Literature and is an active researcher and scholar in the field. She has published several articles, chapters and books, including 'Beckett and Politics' (Palgrave, 2020) and a chapter in 'The Oxford Handbook of Contemporary British and Irish Poetry' (Oxford University Press, 2013).

Her teaching experience encompasses KS3, GCSE, A Level, Access to HE and university level English Literature and Study Skills.

### Course Overview

Lesson Title	Overview
Introduction to language analysis	This lesson will introduce students to the basics of language analysis; looking at spontaneous speech, phonetics, phonology, grammar and modes of address. Students will learn how to analyse different pieces of text in greater detail and how each part of a written piece can be further investigated.
Texts in context	In this session we will build upon some of the analytical work we did in the prior week's session but with the added layer of context. Students will analyse texts within their historical contexts and consider their place in the modern world.
Representation in texts	In this session we will look at how language is used to convey diversity in texts, including gender and ethnicity. Texts from a range of different periods will be used to compare and contrast representation over a broad time period.
Regional variations and global English	In this session we will look at the English language on a local and global scale. We will look at regional dialects and idioms, and how English has evolved within small microcosms around the country. We will also look at

	English around the globe, comparing our own dialectal language to other variations, such as in the USA.
<b>Introduction to language analysis</b>	This lesson will introduce students to the basics of language analysis; looking at spontaneous speech, phonetics, phonology, grammar and modes of address. Students will learn how to analyse different pieces of text in greater detail and how each part of a written piece can be further investigated.

# Head-Start to A-Level Chemistry Sessions

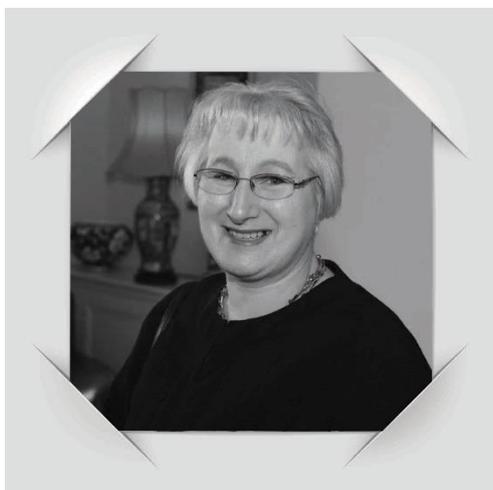
## Summer 2021

### Overview

Our Head-Start courses are designed to help ease the difficult transition between GCSE and A-level. Even top performing students find the jump challenging, so join our summer sessions to build your confidence and prepare for September.

Chemistry A-level is a demanding course and introduces a lot of new concepts and topics. These sessions are designed to reinforce the fundamentals from the GCSE course and bridge the gap to A-levels by introducing the new topics in a way which is accessible and fun. The small group setting allows the tutor to work individually with students to accelerate progress.

### Tutor Introduction – Sheralynne Dowling



Sheralynne offers more than 20 years teaching experience in both the state and private sectors. In 2017 she decided to leave formal school education to concentrate on student centred, tailored, private tuition in science and maths. Her teaching/tutoring experience includes Chemistry and Physics from KS3 to A Level plus KS3 GCSE Foundation, Higher Level Maths and “Kickstart” to A Level, She has worked with Arlen Education since November 2017.

Sheralynne studied Chemical Process Engineering at Aston University then worked for a multinational food company in food production then engineering for 12 years. She qualified as a Chartered Engineer 1992. She then worked for a short period as a freelance IT trainer before returning to University in 2001 to study for a PGCSE in secondary Science.

### Course Overview

Lesson Title	Overview
Atomic Structure	This session consolidates students' current knowledge of atomic structure, and then expands into the AS course by introducing the concepts of electronegativity.
Electronic Structure	This session teaches students how to construct electronic configurations for atoms using orbitals and sub-shells, making sure that each student fully understands the principles, which is important for later topics.
Analysis	This session builds on the topic of chemical analysis from GCSE, including mass spectrometry, and the start of infrared spectroscopy. Students learn how to interpret results to identify compounds.
Ionisation Energies	Although GCSE covered the basics of ionisation, this session expands the students' knowledge to include ionisation energies, and the patterns and trends across the periodic table.
Covalent bonds and angles	This topic delves into bonding to look at bond angles, and pi and sigma bonds, linking to organic chemistry with alkanes and alkenes.

# Head-Start to A-Level Maths Sessions

## Summer 2021

### Overview

Our Head-Start courses are designed to help ease the difficult transition between GCSE and A-level. Even top performing students find the jump challenging, so join our summer sessions to build your confidence and prepare for September.

Maths A-level is a challenging course and is a big step-up from Year 11. These sessions are designed to reinforce the fundamentals from the GCSE course and bridge the gap to A-levels by introducing the new topics in a way which is accessible and fun. The tutor will work with each student individually within the small group setting to maximise the benefit of the classes.

### Tutor Introduction – Kara Niven



Kara graduated from Imperial College having obtained a MSci in Physics. She embarked on 18 months of travel before being employed on a graduate scheme learning computer programming. After four years in this career Kara had the opportunity to move to Chicago, USA, where she had a few temporary jobs before settling to work for an organisation that promoted health and fitness for girls. This sparked a passion for working with young people and on returning to the UK in 2010 Kara started working as a teaching assistant before deciding to train to teach mathematics.

Kara trained as a maths teacher in 2011 through the Graduate Teaching Programme at Landau Forte College and the University of Nottingham. She has since taught mathematics at KS3, GCSE and A Level. She is currently an examiner for Pearson for A level mathematics, providing a unique insight into exam techniques and common errors.

### Course Overview

Lesson Title	Overview
Indices	This session refreshes the indices topic from GCSE, and extends the topic into fractional and negative indices, and finally into solving equations using indices.
Quadratics	This session recaps the fundamentals of quadratics, including solving and sketching. The tutor then guides student through quadratic inequalities and algebraic problems.
Differentiation	This session introduces the concept of differentiation, and students can practice this new skill at their own pace, before learning to apply this knowledge to graphs.
Integration	This session consolidates the basics of differentiation and introduces students to integration. The session ends with applying both integration and differentiation techniques to graphs to find areas and gradients.
Polynomials	This topic expands on the topic of quadratics by widening the student's knowledge to include polynomials. Students will learn how to factorising cubic and quartic equations, as well as a brief introduction to binomial expansion.

# Head-Start to A-level Physics Sessions

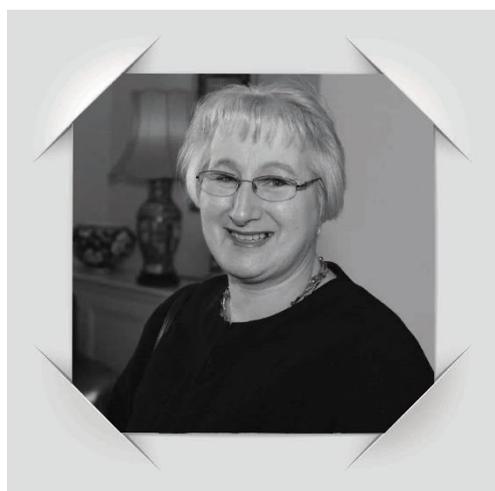
## Summer 2021

### Overview

Our Head-Start courses are designed to help ease the difficult transition between GCSE and A-level. Even top performing students find the jump challenging, so join our summer sessions to build your confidence and prepare for September.

Physics A-level is a demanding course and full of new and intellectual concepts. These sessions are designed to reinforce the fundamentals from the GCSE across the physics curriculum, as well as starting to introduce some content from the AS. The small group setting allows the tutor to work individually with students on a personal level to further understanding and boost confidence.

### Tutor Introduction – Sheralynne Dowling



Sheralynne offers more than 20 years teaching experience in both the state and private sectors. In 2017 she decided to leave formal school education to concentrate on student centred, tailored, private tuition in science and maths. Her teaching/tutoring experience includes Chemistry and Physics from KS3 to A Level plus KS3 GCSE Foundation, Higher Level Maths and “Kickstart” to A Level, She has worked with Arlen Education since November 2017.

Sheralynne studied Chemical Process Engineering at Aston University then worked for a multinational food company in food production then engineering for 12 years. She qualified as a Chartered Engineer 1992. She then worked for a short period as a freelance IT trainer before returning to University in 2001 to study for a PGCSE in secondary Science.

### Course Overview

Lesson Title	Overview
Energy	This session focusses on the transfer of energy in systems, and how machines are designed to operate efficiently using ideas about energy, mass and forces.
Electricity	This session makes sure that students are comfortable with the concept of static electricity current and develops into the idea of superconductivity and resistance in electrical components.
Waves	GCSE studies of wave phenomena are extended through a development of knowledge of the characteristics, properties, and applications of travelling waves and stationary waves.
Atoms and Particles	This exciting topic introduces to students the world beyond the atom, and breaks protons and neutrons down into quarks, and quantum physics.
Forces and Momentum	This session goes over forces and motion, including acceleration, projectiles and Newton’s Law, as well as energy and momentum. The tutor will introduce new situations and broaden their experience of different examples.

# Further Tuition

Haven't quite found what you are looking for in our Summer Courses?

We also provide group tuition in a variety of other subjects and levels, as well as individual online and in-person tuition in the following subjects;

- English
- Maths
- Science
- History
- Geography
- Psychology
- Sociology
- Philosophy
- French
- German
- Spanish
- Art
- Latin
- Classics
- Computer Science
- Music

For more information on how we can help, please contact us using the details below;

01335 388355

[enquiries@arleneducation.com](mailto:enquiries@arleneducation.com)

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