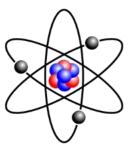




# Welcome to Science



EAST LEAKE





# Science at ELA



"Through high quality teaching and learning, communication, and mutual respect, the Science department work together as a team to nurture a love of science, raise standards, student expectations and maximise progress. We aim to ensure that every individual student is supported to achieve their full potential and beyond."



### The team



Head of Faculty- Miss N Fox (<u>nfox@eastleak-ac.org.uk</u> Second in faculty- Mr P Collins Teacher of Biology & Assistant Principal- Dr S Benskin Teacher of Biology & Head of Year 7- Miss M Aldridge Teacher of Biology- Miss K Magee Teacher of Biology- Miss R Harris Teacher of Biology- Mrs K Freeston **Teacher of Chemistry- Miss K Nandha Teacher of Chemistry- Mrs D Mistry** Teacher of Physics & Vice Principal- Mr T Jackson **Teacher of Physics- Dr M Williams** 

### The curriculum our students follow is:

- Student-centred
- Fit for purpose, offering scaffolding and personalisation
- Effective at preparing students for a successful adult and working life in a 21st century global society including building individual's knowledge, developing their love of learning through exploration and developing effective written and verbal communication skills
- Providing every opportunity for students to exceed national standards in attainment and progress
- Nurturing the talents of all and celebrating success at every opportunity
- Focussed on scholastic excellence
- Enriched with STEM opportunities





### Topics at KS3



Cells- the building blocks of life	Looking at plants and ecosystems- Plants
Eating Drinking and Breathing	Variation for Survival
Getting the energy your body needs	Our Health and the effects of drugs
Mixing Dissolving and Separating	Explaining Physical Changes
Elements, Compounds and Reactions	Obtaining useful materials
Explaining chemicals changes	Using our Earth Sustainably
Forces and Their Effects	Magnetism and electricity
Energy Transfers and Sound	Motion on Earth and in Space
Exploring contact and Non-contact forces	Waves and energy transfer

## Science at KS3



In addition to knowledge we also have to learn to be scientists. This is done through:

**Thinking scientifically**- relationships between evidence, ideas and theories. It includes asking questions, considering the quality of evidence, understanding how theories develop, evaluating risks, using units and nomenclature, using equations and evaluating data

**Working Scientifically**- planning and conducting practical investigations and making predictions, recording evidence, presenting and interpreting evidence, developing explanations and evaluating data.

**Developing as learners-** planning progress, acting responsibly and safely, developing resilience, asking questions, communicating effectively, respecting others and collaborating effectively.

**Key vocabulary** is highlighted throughout to support literacy and scientific reading is encouraged in lessons.





#### **Extracurricular**

An extensive range of extra-curricular and enrichment activities are offered to students in Science. A KS3 STEM club allows students to engage in exciting projects linked to CREST awards. We have engaged in STEM competition with local scientific businesses and organised trips and visits across a range of year groups (e.g. Big Band fair; GCSE Science live; Field trip; CERN; twycross zoo). These enrichment opportunities have been proven to have a huge impact upon our students' personal development, behaviour and attitudes, wellbeing, enthusiasm and progress.



In science at ELA, we follow the AQA GCSE specification

This consists of 6 papers at the end of year 11. 2 biology, 2 chemistry; 2 physics

We focus on developing scientific knowledge and skills throughout year 7,8 and 9 and commence the GCSE scheme of work towards the end of year 9.

We have developed lessons to help boost student's knowledge of science and the real world and we link the science that is being undertaken with careers that could be of interest in the future.





Homework is set by each teacher once a week and consists of a mix between a retrieval skills booklet and an online platform homework such as kerboodle or senecalearning



#### If you have any questions, please do get in touch

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