

Eden Park High School

Cross Curricular Provision



SCIENCE

Literacy

Students have opportunities to write up scientific investigations in full sentences. Students will regularly use key terminology in lessons and in written responses. 'Big Write' activities will encourage independent extended writing, once a term based on current topic. Teachers will mark for SPaG within a 'deep mark' every four weeks.

Numeracy

Key calculations are practised to analyse data harvested in experiments. Students have the opportunity to present data they have collected in a coherent way, such as in graphs and results tables. The curriculum provides opportunities for students to memorise and rearrange key equations required for GCSE examinations. Students become fluent at converting and specifying appropriate units of measurement in their multi-step calculations.

Personal Development

SMSC (Spiritual, Moral, Social and Cultural)- Topics such as Genetic modification, Puberty, Fuels, Health, Disease and Development of Medicines all require an element of spiritual, moral, social and cultural understanding in order to fully explore the depth of the topic and its link to real world questions.

British Values- Learning Science at Eden Park requires an appreciation of different viewpoints on controversial subjects that may cause questions on the ethics, and the boundaries of Science. Questions such as can Christians believe in Evolution, and is IVF 'playing God'? Require students to have a mutual respect for each others views, whilst also holding in mind the scientific content.

Citizenship- Science promotes an awareness of key individuals who have played an important part in global change in areas such as Climate change, Astronomy, DNA discovery and Genetics. This encourages students to reflect on what they are passionate about so that they become active citizens.

Independent Learning

Research skills- Students will regularly have opportunities to complete structured research into a notable Scientist, experiment, or new discovery. Students will use this information at KS3 to complete presentations in the classroom, or extended pieces of creative writing such as the 'Big Write'. At KS4 research skills will be used as a method of flipped learning to promote accelerated progress in future lessons.

Metacognition- EPHS Science has an emphasis on mastering key scientific skills. In order to do this students are provided with a progress sheet at the beginning of each topic so that they are able to reflect upon the learning intentions covered and the areas they need to develop at the end of a half term. This will then be reflected on at the end of an assessment in order to complete personalised DIT.

Links with other subject areas

Shared knowledge/content- Human Biology (PE) (Year 7 HT4), Climate Change (Geography)(Year 7 HT2), Disease ((Geography), Waves (Year 8 HT6) (Music), Materials in Chemistry (Year 8 HT2) (Textiles), Photosynthesis (Year 8 HT4, and Year 7 HT4) (Horticulture and Gardening), Food and Nutrition (Year 8 HT1) (Food Technology), Space (Year 7 HT6), and History of Medicines, Periodic Table (Year 8 HT5) development (History), Electricity (Year 8 HT3) (Computing and History), Microscopes and Light (Year 7 HT1, Year 9 HT4) (Photography).

Shared skills- Literacy- constructing sentences and recognising key terminology (English), Numeracy- understanding and analysing data, whilst also completing calculations (Maths), Command words such as Evaluate, Compare, Explain, State, Describe and applying knowledge are all skills that are shared across a number of different subjects. Students will also be critical of the practical work they complete, this skill of critical evaluation is a higher order skill which is valuable in any subject being studied.
