

## Science

**‘Science is a way of thinking much more than it is a body of knowledge.’**

Carl Sagan

### Big ideas in Science:

The Ark Science curriculum is based around the following big ideas within the disciplines of Biology, Chemistry and Physics.

<b>Biology</b>	Cells and systems
	Microbes and health
	Genetics and evolution ( <i>Genes</i> )
	Interdependence ( <i>Eco-system</i> )
<b>Chemistry</b>	Particles and bonding ( <i>Matter</i> )
	Trends and patterns ( <i>Reactions</i> )
	Amounts and equations
	Physical chemistry
<b>Physics</b>	Forces ( <i>Forces</i> )
	Energy ( <i>Energy</i> )
	Waves ( <i>Waves</i> )
	Electricity and magnetism ( <i>Electromagnets</i> )

### KS3:

During Key Stage 3 all students will study the AQA KS3 syllabus. Year 7 and 8 content is taken from book 1 and book 2 of Activate KS3 Science Scheme. Assessments are written against the knowledge and skills in the AQA KS3 syllabus.

### KS4:

Science is a compulsory subject at Key Stage 4. Year 9-11 content is taken from the AQA specifications for Biology, Chemistry, Physics and Combined Science following the OUP SOL.

At Globe we offer two pathways in Science. The majority of our students will take the GCSE Combined Science pathway which comprises of Biology, Chemistry and Physics units. This course provides a firm foundation for progression to AS and A-level Science. The subjects are taught separately and combined at the end of the year for an overall two GCSE grades. For Triple Science candidates there are further units studied within each of the science disciplines which will lead to students obtaining three GCSE grades. The pathway taken by each student is determined by individual prior attainment and progress.

**Combined (Trilogy Route):** Six Exams all one hour 15 minutes each with a weighting of 33% each.

**Triple Science:** For each discipline there are two exams all one hour 45 minutes each with a weighting of 50% in each discipline.

**KS5:**

Science subjects offered at KS5 include Biology, Chemistry, Physics and Psychology. All content taught is according to the AQA syllabus. Please see attached documents for further deta