

## **Science- our intent**

The scale of LJFS allows for a multi-disciplinary approach to science, and references other subjects within the curriculum. We recognise that students should be able to recognise where science fits into the bigger picture in their education and how this impacts their future post 16 and beyond. Students are made aware of the wider world and where science affects all our daily lives.

As such, the science curriculum, is structured to encourage students to aspire to achieve, regardless of prior learning and previous attainment. All students in science are encouraged to continue to develop with no decisions being made about GCSE exam entry until year 11.

The Science curriculum builds on the 10 'Big-Ideas' in science, starting in years 7 & 8 and then being built on in years 9,10 & 11 in a spiral curriculum.

In years 7 and 8, the curriculum is sequenced in blocks, with a discipline being delivered each term. Where appropriate, interleaving is used to ensure students make links across each of the science disciplines. The rationale behind the KS3 curriculum is to provide a robust foundation which is built on as it spirals up, giving students the knowledge and skills needed.

In years 9, 10 and 11 all the disciplines are delivered each week by subject specialists, by interweaving modules to support memory retention and recall. There is spacing at regular intervals of previous learning so that student recognise and employ the skills that are key to the discipline of science and can apply these across a variety of contexts. Dedicated literacy lessons underpin key concepts and enable students to access the varied curriculum. Low-stakes assessment run throughout the curriculum and formative assessments at the end of each module.

Students in KS4 work from folders and with access to a variety of online resources and experience of experiments to collate a body of learning for each subject that grows in complexity.

Smaller groups at KS4 allow us to personalise learning based on our deep knowledge of individual students and intervention is offered in Year 11 as appropriate.

Our subject specialists are passionate about their discipline and are able to share experience of real- world science outside the classrooms; students are taught without bias and many of our students, of both genders, go on to study science at A Level and beyond- some alumni are studying in the fields of medicine and forensic science.