

# YEAR 7 SCIENCE CURRICULUM OVERVIEW



The Science Faculty is committed to developing students in a lifelong education in all STEM subjects by teaching a broad science curriculum which engages and enthral students throughout the key stages. Across biology, chemistry and physics we have many common goals and outcomes; we wish to produce students that are scientifically literate and can accurately read and write about scientific ideas, can make informed decisions about the world around them and issues of the future, have well developed problem solving skills in many different areas and can pull together their knowledge from all sciences. We all view science as a process, driven by a vibrant community who reach consensus - it is not a list of facts. Ultimately we develop students that are enthused and captured by the awe created in the world around us by providing lessons that are interesting, fun and inspiring.

Investigative skills and techniques are at the heart of all sciences and we have embedded frequent opportunities for our learners to develop these at all stages of the curriculum. The curriculum reflects the vast number of our students for whom science will form part or all of their further studies and to this end, from year 7 to year 13, we deliver our lessons with the expectation that our students will take the skills and knowledge they have gained here on into their future careers.

In the Science Faculty, students start with a year of Science skills which is different to a lot of schools but prepares our very academic students with the necessary skills to target the KS3-5 curricula that are introduced from Year 8. This first year allows students to focus on how to process information and develop key scientific skills without being involved with the theory. Pupils are encouraged to make links between science and other subjects: in the Spring term, pupils cover maths in science; in the summer term, pupils look at science and religion; and over the year, pupils undertake several projects that look at science over history, e.g. The History of DNA and The Space Race. These projects also introduce them to key research and referencing skills from an early age and the year gives a brilliant basis for the rest of the time in Science at Tiffin.

# YEAR 7 SCIENCE CURRICULUM



	Year 7
Autumn Term 1	<b>Developing scientific skills</b> Following instructions Health and Safety Types of variables Drawing graphs and tables Lab apparatus Observations and inferences
Autumn Term 2	<b>Focusing on researching and referencing</b> A guide to referencing Using a microscope History of microscopes Research task
Spring Term 1	<b>Writing up practical work</b> Precision and accuracy Writing a method Planning experiments Writing a conclusion
Spring Term 2	<b>Maths in science</b> Sampling Analysing data Graphs Speed, distance and time Calculating uncertainties
Summer Term 1	<b>Combining all skills</b>
Summer Term 2	<b>Combining all skills</b>