



# SCIENCE FACULTY STATEMENT 2017-18

*“The important thing in Science is not so much to obtain new facts as to discover new ways of thinking about them”- Sir William Bragg*

**HEAD OF FACULTY: S. Bukhari**

## KEY STAGE 3

At KS3, Science is taught over two years and follows the AQA KS3 Science Syllabus. It outlines the foundations in Science, how students need to apply and extend that knowledge. We deliver a range of KS3 topics that grasp the interest of students, allowing students to develop their scientific practical skills and prepare them for GCSE's.

The three disciplines Biology, Chemistry and Physics are taught under the 10 Big Ideas including the topics: *Forces, Electromagnetism, Energy, Waves, Matter, Reactions, Earth, Organisms, Ecosystems and Genes.*

Each topic contains four smaller topics that build in complexity from Year 7 to Year 8. By connecting smaller ideas to more abstract ideas, students will be better prepared to apply these concepts when approaching unfamiliar topics.

## KEY STAGE 4

We follow the AQA syllabus. The AQA Syllabus consists of two separate courses; Trilogy (2 GCSE'S) and Separate Science course (3 GCSE'S). Both courses cover content from all three disciplines; Chemistry, Biology and Physics. The course is developed to inspire and challenge students of all abilities. The structure includes purposeful practical activities to engage, motivate and inspire students. There are 21 practical activities in total built in as part of our day to day teaching and learning. Each topic will have an end of topic assessment to ensure all of our students are assessed regularly, throughout the course.

## KEY STAGE 5

The department offers the OCR Biology, Chemistry and Physics at A level. The three sciences are highly valued and are a popular choice here. Although not essential it is highly advantageous to study at least one of the Science disciplines. Chemistry, Physics and Biology are all facilitating subjects, that can be more frequently required for University entry than others.

The syllabi ensure that the first year builds upon GCSE knowledge and covers the core fundamental ideas in each of the Sciences. The first year syllabus focuses on foundation in Science, Mathematical skills and practical skills. In each of the Sciences students will have an opportunity to use technology, relevant instruments and scientific equipment to achieve a Practical Endorsement in Biology, Chemistry and or Physics. In year 2 the courses will be enhanced to a higher, more challenging level where students will have the opportunity to extend their knowledge and apply it in scientific phenomena. This will prepare students for study into higher education in the Scientific field Students will sit three exams for each of the Sciences and a practical endorsement will be completed internally.

## City Academy Curriculum vision

*“Our vision is to inspire and challenge our students to excel in their curriculum pathway, make progress regardless of their starting point and become masters of their learning craft”*

**City Academy Curriculum vision**

*“Our vision is to inspire and challenge our students to excel in their curriculum pathway, make progress regardless of their starting point and become masters of their learning craft”*