

# Key Stage 3 Curriculum: (Science)



## **KS3 Curriculum INTENT**

Science at Caldew is a spiral curriculum that builds upon scientific models of theories and phenomena that challenges every students' view of the world around them. Everyday Learning is adapted and differentiated to enable students to develop their practical skills and explain findings in order to prove or disprove hypotheses. Above all we want to equip students with their own toolkit to enable them to make links with learning and the world around them

# **KS3 Curriculum Information**

### Year 7

Hobnobs are better than Rich Tea biscuits for dunking in tea...

Students will begin by following the scientific enquiry process to test this hypothesis, learning valuable practical skills along the way. Following this fun and engaging investigation students will then study ten topics covering biology, chemistry and physics. At Caldew, we follow the Oxford University Press Activate 1 Scheme of work, which has a big emphasis on practical science. The topics studied in Year 7 are:

Biology: Organisms, Ecosystems and Genes

Chemistry: Matter, Reactions and Earth

Physics: Forces, Electromagnets, Energy and Waves

### Year 8

Students in Year 8 will revisit knowledge and skills from Year 7 and build upon them by carrying out investigations, and analysing their findings in order to prove or disprove hypotheses. At Caldew, we follow the Oxford University Press Activate 2 Scheme of work, which has a big emphasis on practical science. The topics studied in Year 8 are:

Biology: Organisms, Ecosystems and Genes

**Chemistry:** Matter, Reactions and Earth

Physics: Forces, Electromagnets, Energy and Waves

### Year 9

In Year 9 students will consolidate knowledge and skills from Year 7 and 8 and build upon these in preparation for their GCSE studies. For the first term students in Year 9 will follow a

skills-based scheme of work. Here they will consolidate their understanding of the scientific enquiry process and be introduced to key practical terminology that they will need to know for their GCSE exams. This is taught by planning and carrying out a variety of investigations, analysing their findings and drawing conclusions from them.

In the Spring and Summer terms, the students will begin the GCSE course which follows the Oxford University Press AQA Science curriculum. The topics studied in Year 9 are:

Biology: Cell Structure and Transport, and Cell Division

Chemistry: Atomic Structure, and the Periodic Table

**Physics:** Conservation and Dissipation of Energy, Energy Transfer by Heating, and Energy Resources