The Science Department

KINGS'

The Team

We are a large department of 15 specialist Science teachers ranging from ECTs to teachers with 30+ years of experience. We currently have four Chemistry specialists, six Physics specialists and five Biology specialists. The team is led by a Head of Science and two Key Stage leads. The team is supported by a team of three excellent Science technicians.

The Space

We have 11 Science labs spread across two floors and a large Science prep room. Our labs are fully kitted out and are great teaching spaces. We also have a dedicated Science Workroom for Science teachers to work and socialise in. The Workroom has a kitchen and photocopier for staff to use. All teachers are given desk and shelf space in the workroom in addition to an allocated lab.

Teaching and Learning

We place a huge emphasis on growing great teachers within the Science department. We are a tight knit team who support each other and help each other grow. In addition to the whole school Teaching and Learning Priorities, our pedagogical CPD is based on the ideas from Adam Boxer's "Teaching Secondary Science".

We are currently focusing on identifying and checking prerequisite knowledge.

The Curriculum

We have a fully resourced curriculum for both Key Stage 3 and Key Stage 4.

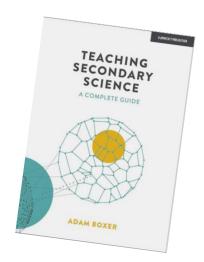
Our KS3 curriculum has been made and developed "inhouse". The curriculum is based on precise learning points. These are essentially a list of points for each lesson that all pupils must know and remember. This is supported by core questions and answers that are printed in the Knowledge Organiser.

For KS4, we follow the AQA Combined Science course and the Separate (Triple) Science Course. Around 40% of KS4 pupils opt to follow the Separate (Triple) Science Course as part of their options. These pupils are taught by three specialist Science teachers. Teachers are expected to be able to teach Separate (Triple) Science in their specialism, and Combined Science in their specialism and a preferred second specialism.









The Science Department



Our Vision

"You cannot change the world if you do not first know the world."

The aim of the Kings' School Science Curriculum is to help pupils acquire knowledge, so that this knowledge can act as a springboard for a richer appreciation of the world and an increased ability to overcome its challenges.

Our Science Curriculum ensures that the acquisition of knowledge is at the heart of our lessons. This is because scientific knowledge has the ability to enrich people's experience of the world; has the power to drive human progress; allows pupils to think like scientists; and will prepare pupils to be informed citizens when they leave us in Y11.

Within our five-year curriculum, we aim to provide the foundations for understanding the world through the specific disciplines of Biology, Chemistry and Physics. Pupils will develop a sense of enthusiasm and curiosity about natural phenomena and will be encouraged to understand how Science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Our curriculum offer at Kings' allows pupils to participate in regular and meaningful practical experiences which are built into the lessons. Our practical work provides pupils with a rich learning experience, whilst also building opportunities for the development of working scientifically skills and use of apparatus and techniques skills. Through Scientific enquiry, pupils will be able to experience Scientific phenomena in a way that builds on the substantive knowledge they have acquired, allowing pupils to develop disciplinary knowledge of the subject. This allows pupils to "think like scientists" and understand how scientific knowledge is established and updated.

Now more than ever we need young people to have acquired an extensive and connected scientific knowledge base that will allow them to make informed choices in the future, from issues such as climate change to choices about health and vaccinations. Furthermore, scientific discovery is driven by pushing the boundaries of the knowledge that already exists. Therefore it is imperative that our pupils, no matter their background or ability, are able to leave us with a deep body of Scientific knowledge.