



Hampton Court House

Curriculum Outline 2019/20 – Year 9 Chemistry (TJMWW)

Autumn 2019

Principal Text: *AQA GCSE (9-1) Chemistry by CGP*

Year 9 will begin by examining the structure of atoms, the history of discoveries about the atom, and how atomic structure is linked to the periodic table.

We will then tour the periodic table, looking at the properties of halogens, alkali metals, noble gases, and transition metals individually.

Following this we will investigate ionic bonding and the formulae, properties, reactions, and uses of ionic compounds.

Year 9 will have a strong focus on bridging the gap between the 13+ Common Entrance exam and GCSE chemistry. Students will be introduced to GCSE topics, which will allow them to build a strong foundation to set them up for success in GCSE Chemistry.

Teaching aims to have a practical and experimental emphasis to encourage understanding of the topics covered, underpinned by scientific theory, which will prepare students for future success in Chemistry.

Links with fundamental values
Scientific collaboration - Democracy, mutual respect
Laboratory rules - Rule of Law
Development of the atomic model - Mutual respect
Periodic Table - Democracy
Climate Change - Mutual respect

Social, moral, spiritual and cultural content
Pollution of the Environment - Moral
Scientific Collaboration - Social
Science and society - Moral & Cultural

Opportunities to independently extend learning
Reading more advanced material such as GCSE Chemistry Textbooks or New Scientist Magazine.

Regular consolidation of notes to check for understanding.

Requesting questions from past papers to be exposed to exam style questions.

Attending STEM Club.

Watching a TV programme or using the internet to find out about science in the news.

Spring 2020

Principal Text: *AQA GCSE (9-1) Chemistry by CGP*

Throughout the Spring Term, students will continue to examine chemical bonding and develop a more in-depth understanding of the types of chemical bonds. Students will practice writing formulae for compounds and balanced chemical equations.

We will finish the term by looking at the reactivity of metals and acids. Students will be able to explain the order of metal reactivity with reference to electronic structure.

Summer 2020

Principal Text: *AQA GCSE (9-1) Chemistry by CGP*

This term we will look at the chemistry of acids and bases, building from material covered in year 7 and 8 to get a more comprehensive model of acid-base reactions. We will compare strong and weak acids, and write ionic equations for acid reactions.

In the later part of the term we will begin to look at organic chemistry, starting with crude oil refining and moving on to the reactions of alkanes and alkenes, and organic synthesis