

WTBA Learning Journey: Chemistry

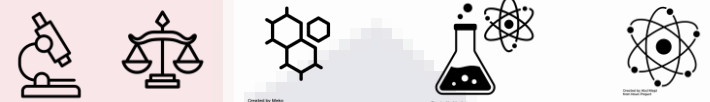
Intent: At Waltham Toll Bar we aim to enthuse and produce the next generation of scientists that will be able to combat the problems faced by the world. The Science curriculum establishes an understanding of the key disciplinary and substantive knowledge required to understand the scientific world around us. Students will cover topics that develop their inquiring minds and these topics will be interleaved with the key skills required to become a successful scientist. Students will continue to explore scientific concepts and analyse data that they have obtained as they approach a new range of inquiry questions as the years progress.

Key Themes

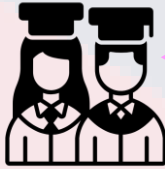
1. Particle Theory
2. Chemical Reactions
3. Analytical Chemistry
4. Environmental Science
5. HSW – How Science Works

Post-16 Links

Biology, Law, Chemistry, Applied Science, Physics



GCSE Exam



Remember: To focus, respond to all questions and try your best.

Exam Revision

C6
C5
C4
C3

C6 – Making Useful Chemicals



Mock Exam



Q: How do we make chemicals and control reactions?

C1 C2

YEAR 11
GCSE

Q: How are chemicals separated and tested?

C5 – Chemical Analysis



Q: Why do materials have different properties?

Q: How and why do we extract materials from the Earth?

C3 – Chemicals of the Natural Environment



YEAR 10
GCSE

C4 – Material Choices

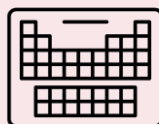


C1 – Air and Water

Q: What information is contained in the periodic table?

Q: Why do we monitor changes to our environment?

C2 – Chemical Patterns



Separation Techniques



Q: What resources are provided by the Earth?

Q: How are chemicals separated?

Q: What reactions do metals undergo?

Materials from Earth



Metal Reactions



Q: Are all chemicals dangerous?



Acids and Alkalis

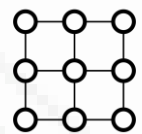
YEAR 8

Q: Can we predict an outcome from patterns and trends?

Chemical Reactions



Q: Why are chemical reactions important?



Particles

Q: What are the building blocks of the world?

Chemical Patterns



HSW: How do Scientists work safely?

Laboratory Introduction



YEAR 7



“ If I have seen further than others, it is by standing upon the shoulders of giants” Isaac Newton