CHEMISTRY LEARNING JOURNEY

SARAH BONNELL SCHOOL

Our aim is to provide the tools and resources for students to work scientifically and develop the following skills:

The 4 C's in STEM

collaboration
creativity
communication
critical thinking

BTEC Applied Science

A-Level Chemistry

International Baccalaureate (IB)

GCSE preparation & revision

Haber process & NPK fertilisers

Enrichment Calendar

Summer Term

Crest Awards

YEAR 11

Earth's atmosphere | Greenhouse gases | Atmospheric pollutants | Earth's resources & potable water | Life cycle assessment & recycling | Using materials

Testing ions | Testing gases | Purity, formulations & chromatography | Polymers | Alkenes & alcohols | Fractional distillation & cracking | Crude oil, hydrocarbons, alkanes

YEAR 10

Reversible reactions & dynamic equilibrium | Rate of reactions | Chemical and fuel cells | Endothermic & exothermic reactions | Electrolysis | Reactivity of metals | Reactions of acids | Volume of gases | Yield & atom economy | Moles & concentrations | Balancing equations & RFM | Conservation of mass | Nano-particles | Allotropes of carbon | Bonding & its properties | Transition metals

YEAR 9

Periodic table | Atoms & isotopes | Earth (Space) | Reactions (Acids and alkalis)

YEAR 8

Earth (Rocks) | Matter (Periodic table)

YEAR 7

Matter (Solid, liquid and gas) | Reactions (Metals and non-metals)

Marie Curie

Rosalind Franklin

Alice Ball

Gertrude B Elion

Marie Maynard

Gerty Cori

Spring Term

STEAM Week

STEAM Day

British Science

Autumn Term

Black History Month

Prior KS1/2 Knowledge

States of matter, physical & chemical properties, evaporation, condensation, dissolving, filtration

Weekly Enrichment Sessions

Science fun club