

Chemistry and Physics Year 7, 8, and 9

Following Schemes of Learning, lessons are planned to cover all Key Stage 3 Curriculum topics relevant to Chemistry and Physics, including the principles expected for the GCSE level. Lessons are delivered in 2 sessions per week, mainly within the science lab for engaging the learners with lab-based activities following the teacher's lecture. Teacher and LSAs provide students with all the necessary step by step instructions for carrying with the activities and experiments, and advice concerning health and safety. Based on the topics, students participate in activities either individually or within groups of similar abilities. This leads students to develop skills for being both independent learner and a team player. Students' progress is observed and assessed based on their attendance, contribution in the lesson, homework, and abilities in demonstrating their skills of planning, observing, analysing and evaluating when doing tasks, assignment, and lab-based activities. It also includes assessing risks, working with tools, apparatus, variables, graphs, trends, modelling; and even, projecting ideas. In this respect, the teacher maintains students' homework and assignments in Learning Logs and marks them adequately.

We intend to deliver exciting and enjoyable lessons to absorb students' attention and motivate them to apply the acquired skills in their everyday life.

Year 10 (Chemistry and Physics):

Year 10 students are treated in the same fashion as the year 7-9 students; however, their learning material and activities are planned to cover the IGCSE Curriculum and Schemes of Learning thoroughly.

Year 7

- Forces – speed and gravity
- Electrical circuits
- Sound and light
- Physical and chemical change
- Particle model
- Separating mixtures
- Metals and non-metals,
- The periodic table
- Acids and alkalis
- Earth structure

Year 8

- Contact forces and pressure
- Magnets and electromagnets
- Heating and cooling

- Lightwave and properties
- Element and the Periodic table
- Chemical energy
- Chemical reactions
- Climate and Earth's resources

Year 9

- Type of forces and Newton's law
- Circuit-Series and parallel circuit
- Energy
- Wave effects and properties
- Element, Compound and the Periodic table
- Atomic structure
- Type of reaction
- Acids and alkalis
- Chemical energy
- Chemical reactions

Year 10-Physics

- Making measurements
- Describing motion
- Forces and motion
- Turning effects of forces
- Forces and matter
- Energy transformations and energy transfers
- Energy resources
- Work and power
- Electricity and magnetism
- Sound and light

Year 10-Chemistry

- The nature of matter
- Elements and compounds
- Chemical reactions
- Acids, bases and salts
- Quantitative chemistry
- Catalysts
- Atomic structure
- Reversible reactions