

YEAR 7

Science

Term 1

- Students begin with transition lessons on scientific skills and how to use key equipment,
 Students also learn about key scientific discoveries and Science in the news which informed the science they learn today such as Robert Hooke discovering the cell and Dalton and the atom.
- Students also learn how to use a microscope and build a model cell.
- Students improve their research skills by researching elements and their discoveries as well as learning how to write up experiments through a range of chemistry investigations.
- A wide range of practical activities are used to model Energy Stores and the particle model and there will be a Solar Car Challenge to build upon the ideas of Energy Stores applied to developing future technologies considering social responsibility.
- "Switch off fortnight" will take place focusing on how we as individuals, families and a school can help to tackle the impacts surrounding climate change.

Term 2

- British Science Week will take place with a series of lessons linking to the yearly theme. Previous examples have included a focus on current topics such as plastic pollution in the oceans.
- Students will collect their first set of data for the national programme 'Under Your Feet Week' building foundations for their unit on Ecology later in the term providing insight into real applications of Science.
- Body Systems including the reproductive system and digestive systems will be studied with an emphasis on building healthy habits and nutrition.
- Students will build on their first Ecology project and investigate how we collect data on and classify organisms. Students independently research an endangered species of their choice and present their findings to classmates.
- Students will have the opportunity to consolidate their experimental skills and literacy skills
 through writing up further chemistry experiments and they will also learn about their
 applications in everyday life.

Term 3

- Chemicals in the real world and their applications will be studied including origins of indicators and how indigestion tablets work.
- Students will apply their understanding of Forces to a wide range of practical and real life contexts such as Friction in sport including designing and building a balloon powered car.
- An enrichment project surrounding the importance of bees will be carried out. This will help students to further their understanding of biodiversity and highlight the importance of conserving wildlife for future generations.
- "Stem day" will take part where students will put their practical skills into practice whilst developing their team-work and problem solving skills.

Regular mini tests, skills activities and summative assessments are used to assess progress throughout Year 7.