

Year 10 Science

Curriculum Manager: Mr I Hughes

Teaching Staff: Mr T Carey, Dr L Crascall, Mr G Damant, Dr M Fox, Mr I Hughes, Mrs K Lay, Mr I Maguire, Mr A Mee, Miss J Mercer, Mrs A Pirzada, Miss C Quinn and Mr M Reeve

Curriculum Overview:

In Year 10 pupils study the Combined Science (9-1) GCSE course. The course provides a programme of study across a number of topics that fulfil the requirements of the National Curriculum, and includes focus on core practical content, which is a key element of the Combined Science (9-1) GCSE. The course ensures that students will steadily grow in confidence when using mathematical skills, thinking scientifically and communicating their ideas clearly and logically.

Topics Studied - Term 1

- Waves
- Light and the electromagnetic spectrum
- Ionic bonding, covalent bonding and types of substance
- Health, disease and the development of medicines
- Radioactivity
- Calculations involving mass

Topics Studied - Term 2

- Plant Structures and their Functions
- Acids and Alkalis
- Energy – Forces Doing Work/
Forces and their Effects

Topics Studied - Term 3

- Animal coordination, control and homeostasis
- Electrolytic processes, obtaining and using metals
- Reversible reactions and equilibria
- Electricity and circuits

Assessments:

Pupils are assessed regularly using quick assessment tasks and low stakes quizzing which inform students of the progress they have made.

Pupils are assessed at the end of each topic using GCSE exam-style questions. Standard and higher tier tests are available in each topic to provide assessment from grade 1 to 9 (the tier of test that pupils sit will depend on their Science set). Revision lessons and materials are embedded into teaching time, and this can be supported by the purchase of revision guides and workbooks.

Cumulative assessments will be carried out at the end of the autumn term to assess all of the pupils' knowledge on Science taught during the year. Pupils will also take an End of Year Assessment, which will include content taught throughout Year 9 and Year 10. It is therefore vital that pupils constantly revise previous content to retain scientific knowledge.

Homework:

Teachers set regular homework on 'Show My Homework'. Homework is varied and includes assignments, Internet research, revision, quizzes, spelling tests and learning Physics formulae. We also set homework using ActiveLearn (Science online learning platform), which provides a range of activities to complement lessons.

Other Useful Information:

GCSE Science revision guides and workbooks are available to purchase from the Science Faculty (£9 for Combined Science and £16 for Triple Science).

The Science Faculty provides a comprehensive suite of after-school Science revision sessions – the timetable for these is provided on Google Classroom and displayed in every Science classroom.

The BBC Bitesize and Seneca Learning websites are highly recommended for helping pupils to revise Science GCSE topics.