Northallerton School & Sixth Form College
Being the best we can be

Year 9 Chemistry (AQA Sciences)

In Year 9 students begin the chemistry GCSE course. They will cover the first two topics of the course which are 'Atomic Structure and the Periodic Table' and 'Bonding, Structures and Properties of Matter'. Both these topics are fundamental to a lifelong understanding of the basic principles of chemistry and cover the groundwork needed for the rest of the GCSE course. While there are no required practicals in these topics, practical work is used where appropriate to support learning. This year is used to embed key scientific vocabulary into the students' repertoire and encourage the important analytical skills needed for the rest of the course. In Year 9 students are taught by subject specialists in a carousel, studying two distinct blocks of work for each of the three sciences; the first block of work will be completed in the autumn term; the second block of work will then be completed during the spring and summer terms during which time students will decide whether they choose to study for **three** separate science GCSEs or **two** combined science GCSEs. The Year 9 curriculum will prepare all students for either choice.

Methods of deepening and securing knowledge:	
Interleaving	Starter tasks are designed to check knowledge from not only the previous lesson, but also lessons earlier in the topic and sometimes even other topics within chemistry which they will have covered previously.
Checkpoints/ mini plenaries	These are used within lessons to check understanding and address any misconceptions before moving on.
Independent study	Educake questions are used as a means of low stakes testing to consolidate learning and check understanding.
Assessment for Progress	Each of the topics will have an 'Even Better If' (EBI) assessment where students are provided with bespoke tasks designed to help them reach the next level in their learning.

	Block 1 (Autumn Term)	Block 2 (Spring and Summer Term)
Topic(s)	**Atomic structure and the periodic table** • Structure of the atom. • Sub-atomic particles. • Separating mixtures. • Development of the atomic model. • History of the periodic table. • Group 1. • Group 7. • Group 0.	**Bonding, structures and the properties of matter** • States of matter. • Ionic bonding. • Covalent bonding. • Properties of ionic compounds. • Properties of simple molecules. • Giant covalent structures. • Metallic bonding. • Polymers. • Fullerenes. • Alloys. • Nanoscience.
Assessment	• Ongoing assessment. • Educake low stakes test. • Topic assessment. • EBI assessment review.	• Ongoing assessment. • Educake low stakes test. • Topic assessment. • EBI assessment review.
CEIAG *(Careers that are linked to that topic)*	Research chemist.	Chemical engineering. Material science.

Independent Study
Educake is used to set timely and relevant revision questions throughout the topic. There will be around 20 questions set and the difficulty will be tailored to the ability of the group. Students can immediately see their scores and also identify which areas are their strongest and weakest within the questions given. Senecalearning.com also provides an incredible revision resource to allow students to consolidate their learning at their own pace.