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

Year 11 Physics (AQA Triple Science)

With most of the course already complete, this year will see students finishing off the final two units of the course and then beginning thorough revision in preparation for their exams. The Forces topic provides a strong foundation for any students that want to go into the fields of mechanics or engineering in the future. The Space topic looks at the physics of the solar system and explains how the universe was formed. The Space topic is only studied by students doing triple science and is always one of the most popular topics in lessons.
The two final required practicals are carried out this year. Students will then embark on a bespoke schedule of revision tailored to both class and individuals to maximise attainment in the final examinations.

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 physics 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	Past exam questions are set to assess subject knowledge and the ability to apply it in exam questions. 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.

	Autumn term 1	Autumn term 2	Spring term 1
Topic(s)	**Forces** ● Types of Force. ● Weight and gravity. ● Resolving Forces. ● Newton's Laws of Motion. ● Speed and velocity. ● Motion graphs. ● Constant acceleration. **Required Practicals** ● **Investigating the extension of a spring** Investigate the relationship between force and extension of a spring. ● **Newton's second law of motion** Investigate the effect of varying the force on the acceleration of an object of constant mass and the effect of varying the mass of an object on the acceleration produced by a constant force.	**Forces** ● Free fall and terminal velocity. ● Braking distances. ● Momentum. ● Moments and levers. ● Gears. ● Pressure.	**Space** ● Formation of the solar system. ● Orbital motion. ● Life cycle of a star. ● Fusion. ● The changing universe. ● The Big Bang.
Assessment	End of unit test followed by EBI tasks.	**First pre-public examinations**	**Second pre-public examinations** End of unit test followed by EBI tasks.
CEIAG *(Careers that are linked to that topic)*	Automotive design and engineering.	Automotive design and engineering.	Astrophysicist.

	Spring term 2	Summer term 1	Summer term 2
Topic(s)	**Paper 1 revision**	**Final revision**	
Assessment		**GCSE Exams** (Paper 1: biology, chemistry and physics).	**GCSE Exams** (Paper 2: biology, chemistry and physics).
CEIAG *(Careers that are linked to that topic)*			

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. Past exam questions will also be used to practise applying knowledge to different contexts.