

Table 1: Summary of the results of the assessment of the impact of the proposed project on the environment and the community.									
Category	1	2	3	4	5	6	7	8	9
1. Environmental Impact	1.1 Air Quality	1.2 Noise and Vibration	1.3 Water Resources	1.4 Land Use and Planning	1.5 Cultural Heritage	1.6 Socio-Economic	1.7 Cumulative Impacts	1.8 Climate Change	1.9 Biodiversity and Nature Conservation
2. Social and Economic Impact	2.1 Employment	2.2 Community Services	2.3 Infrastructure	2.4 Housing	2.5 Health and Safety	2.6 Equality and Diversity	2.7 Access to Services	2.8 Quality of Life	2.9 Local Economy
3. Cumulative Impacts	3.1 Air Quality	3.2 Noise and Vibration	3.3 Water Resources	3.4 Land Use and Planning	3.5 Cultural Heritage	3.6 Socio-Economic	3.7 Cumulative Impacts	3.8 Climate Change	3.9 Biodiversity and Nature Conservation
4. Mitigation Measures	4.1 Air Quality	4.2 Noise and Vibration	4.3 Water Resources	4.4 Land Use and Planning	4.5 Cultural Heritage	4.6 Socio-Economic	4.7 Cumulative Impacts	4.8 Climate Change	4.9 Biodiversity and Nature Conservation
5. Monitoring and Reporting	5.1 Air Quality	5.2 Noise and Vibration	5.3 Water Resources	5.4 Land Use and Planning	5.5 Cultural Heritage	5.6 Socio-Economic	5.7 Cumulative Impacts	5.8 Climate Change	5.9 Biodiversity and Nature Conservation
6. Conclusion	The proposed project is considered to be acceptable, provided that the mitigation measures are implemented and the monitoring and reporting requirements are met.								

Year Group 11						
Term	1	2	3	4	5	6
Topic Title	Finish 6.1	6.2 & Start 7.1	Complete 7.1 Start 7.2	Complete 7.2 & Start Revision		
Rationale	In Y8 pupils covered the structure of atoms which is needed before moving on to this topic	This topic builds on the concepts of energy transfer studied at KS3 in Y7&8	This topic builds on the concepts of energy transfer studied at KS3 in Y7&8	See previous		
Prior knowledge	Learners should have prior understanding of the atomic model, chemical symbols and formulae.	Learners have prior knowledge of energy listed as nine types, from Key Stage 3. They will have an understanding that energy can be transferred in processes such as changing motion, burning fuels and in electrical circuits. Learners should also be aware of the idea of conservation of energy and that it has a quantity that can be calculated.	Learners should be aware of the transfer of energy into useful and waste energies. They will have an understanding of power and how domestic appliances can be compared. Learners will have knowledge of insulators and how energy transfer is influenced by temperature. They should have an awareness of ways to reduce heat loss in the home.	See previous		
Key knowledge/skills development	Having considered the general characteristics of waves and particles, we now move on to look at radioactive decay which combines these two ideas. The idea of isotopes is introduced, leading into looking at the different types of emissions from atoms.	This topic acts to consolidate the ideas of energy that have been covered in previous topics as it is a fundamental concept that underpins many of the ways in which matter interacts.	This considers the idea of conservation and dissipation of energy in systems and how this leads to the efficiency. Ways of reducing unwanted energy transfers and thereby increasing efficiency will be explored.	See previous		
National Curriculum/specification links	P6.1 a-i	P6.2 a-e P7.1a-c	P7.1 d-e P7.2 a-c	P7.2 d-g		
Literacy	https://nethorpe.sharepoint.com/:/u/ScienceofEnergy/Forms/AllItems/Forms/Physics%20Booklet%20Summary%20Booklet	https://nethorpe.sharepoint.com/:/u/ScienceofEnergy/Forms/AllItems/Forms/Physics%20Booklet%20Summary%20Booklet	https://nethorpe.sharepoint.com/:/u/ScienceofEnergy/Forms/AllItems/Forms/Physics%20Booklet%20Summary%20Booklet	https://nethorpe.sharepoint.com/:/u/ScienceofEnergy/Forms/AllItems/Forms/Physics%20Booklet%20Summary%20Booklet		
Numeracy	Wave equations, Nuclear equations	Use and application of all energy formulae	Electrical power and efficiency			
STEM	Medical physics	Machines	Energy for homes and reducing carbon footprints	Energy for homes and reducing carbon footprints		
Cross curricular links	Geography mining, biology tracers and cancer	Geography energy demands	Geography energy demands	Geography energy demands		
Key vocabulary	absorption spectrum activity alpha (radiation) atomic number becquerel (Bq) beta (radiation) energy levels (of an atom) emission spectrum Geiger counter half-life ion ionising radiation isotope (of an element) mass number penetrating power photon radiation radioactive random stable (isotope) subatomic particles unstable (nucleus)	background radiation chain reaction contamination gamma knife hazard irradiation nuclear fission nuclear fusion nuclear power station	chemical store closed system elastic store electrostatic store gravitational gravity store heating kinetic store Law of Conservation of Energy magnetic store mechanically nuclear store thermal store	dissipation (of energy) efficiency insulation kilowatt-hour (kWh) lubrication power rating Sankey diagram thermal conductivity (W/mK)		
Catch up Plan / Closing the gaps	<p>What are the Key skills/concepts/knowledge that each child should have learned (not covered) since march? Practicals resumed and PAGS missed to be completed and reviewed once course content complete.</p> <p>How are you identifying gaps in your subject? Y10 assessment based on last year's work. Retrieval starters; SENECA; AP1 and Mock exams</p> <p>Catch up methods, Homework – based on content missed, Review type questioning starters, Questions-in-a-month, Going for Gold, 6 mark Q sheets, PLC Booklets review, SENECA</p> <p>Revision materials: Talking ppt, Get-its and Know-its ppt, "Summary" A3 broadsheet learning mats</p> <p>How are you and your team capturing evidence so that you as HOF can be confident we are aware of all pupils gaps? Faculty Tracker (detailed), SENECA – topic specific assessments, Q&A sessions, Starters, HW</p>					