

## Curriculum Implementation Mapping – Skills and Knowledge

**Subject: Design & Technology**

**Year group: 10**

<b>Topic</b>	<b>Energy, materials, systems and devices</b>	<b>Common specialist technical principles</b>	<b>Specialist materials</b>	<b>NEA Preparation</b>	<b>NEA</b>
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>- Energy generation</li> <li>- Energy storage</li> <li>- Modern materials</li> <li>- Smart materials</li> <li>- Composite materials and technical textiles</li> <li>- Systems approach to designing</li> <li>- Electronic systems processing</li> <li>- Mechanical devices</li> </ul>	<ul style="list-style-type: none"> <li>- Forces and stresses</li> <li>- Improving functionality</li> <li>- Ecological and social footprint</li> <li>- The six Rs</li> <li>- Scales of production</li> </ul>	<ul style="list-style-type: none"> <li>- Sources and origins</li> <li>- Working with specialist materials</li> <li>- Commercial manufacturing</li> </ul>	Understand what is required for the NEA to produce individual student exemplar work.	NEA starts on 1st June.
<b>Skills</b>	<p>Retention of knowledge through revision techniques</p> <p>Implementation of mathematical techniques</p>	<p>Retention of knowledge through revision techniques</p> <p>Implementation of mathematical techniques</p>	<p>Retention of knowledge through revision techniques</p> <p>Implementation of mathematical techniques</p>	Final Development of a range of skills to ensure that students are prepared for their NEA start in June.. Such as Researching, Designing, Making and Evaluating	Use the range of skill that have been learnt throughout the Key Stages.
<b>Assessment Pattern</b>	Homework and Unit test logged on G4S	Homework and Unit test logged on G4S	Homework and Unit test logged on G4S	Throughout using a personalized progress tracking sheet and then updated on G4S.	Throughout using personalized progress tracking sheet on G4S. Students are not given this information as per JCQ requirements.