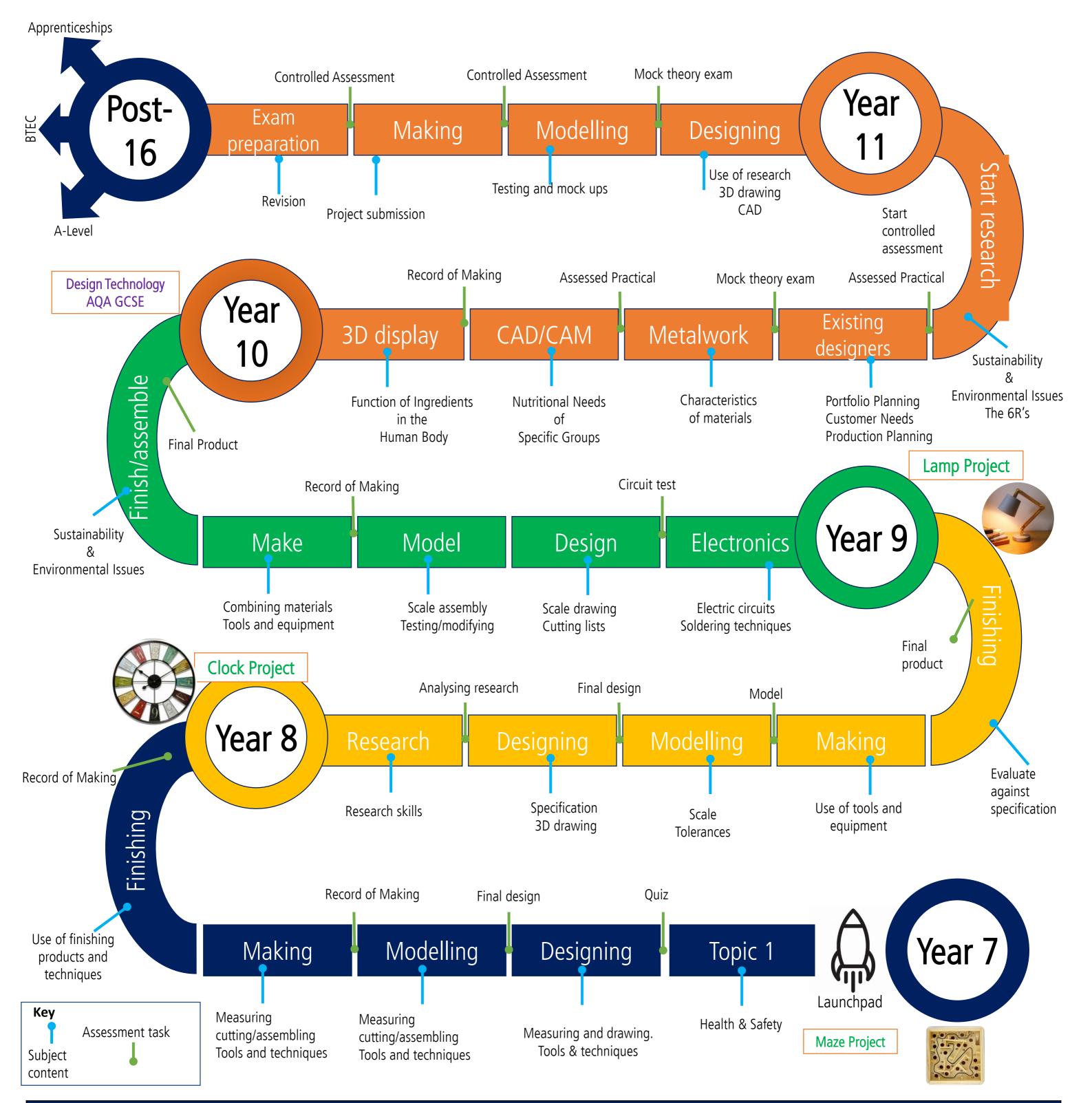


The Resistant Materials Curriculum



The Resistant Materials Curriculum at Nova is Ambitious, Sequenced Carefully, Principled, Inclusive, Research-informed and Enriching.



This Learning Journey includes the use of a broad range of knowledge, skills, and understanding, and prompts engagement in a wide variety of activities. Students make products that meet relevant criteria within a variety of contexts and themes such as: Entertainment, functionality, modern living and includes Health & Safety, Sustainability and the Environment.

In RM, we particularly stretch and challenge the students with a very wide range of knowledge-backed skills to allow them to excel at KS4 and beyond.



The aim is for all students to;

- Understand and apply the principles of material properties and uses.
- Design and make, in KS3, a range of projects that include different materials, techniques and aspects including electronics.
- Become competent in using a range of tools, equipment and techniques which are extended in KS4 to 'industry standard'
- Understand the source, seasonality and characteristics of a broad range of materials.



As part of their work with RM, pupils should be taught how to apply the principles of

tool use in every day situations. Learning how to use tools and materials is a crucial life skill that enables pupils to make and repair things themselves and for others affordably and well, now and in later life.



All students will be taught to use the basic tools, equipment and know where materials come from.

They are also supported and assisted if gaps are evident in this understanding of and application of the tools and techniques.

Common misconceptions may appear in their knowledge and understanding of

where and how a variety of materials are made or sourced from, if this has not been previously taught. This is addressed through the teaching of RM in KS3.



We use a variety of research, including Rosenshine's Principles, Teach Like a Champion strategies and subject specific aspects of pedagogy to enhance the implementation of our curriculum and to ensure that students become effective scholars in our subject. These strategies can be used in a variety of ways , such as: planning, observations, addressing whole school priorities and setting CPD.

Data Driven Instruction is used to identify gaps in student knowledge and understanding so gaps can be closed with further teaching.



Production and enterprise are encouraged through designing and making items for sale at parents' evenings and open evenings throughout the year. These form challenges for students, encouraging resilience, perseverance and the development of a range of high-level skills. We look optimistically to the future with the planning of trips, external demonstrations and local trips to businesses and industry visits.