

Resistant Materials at Stony Dean School – May 2024

Intent

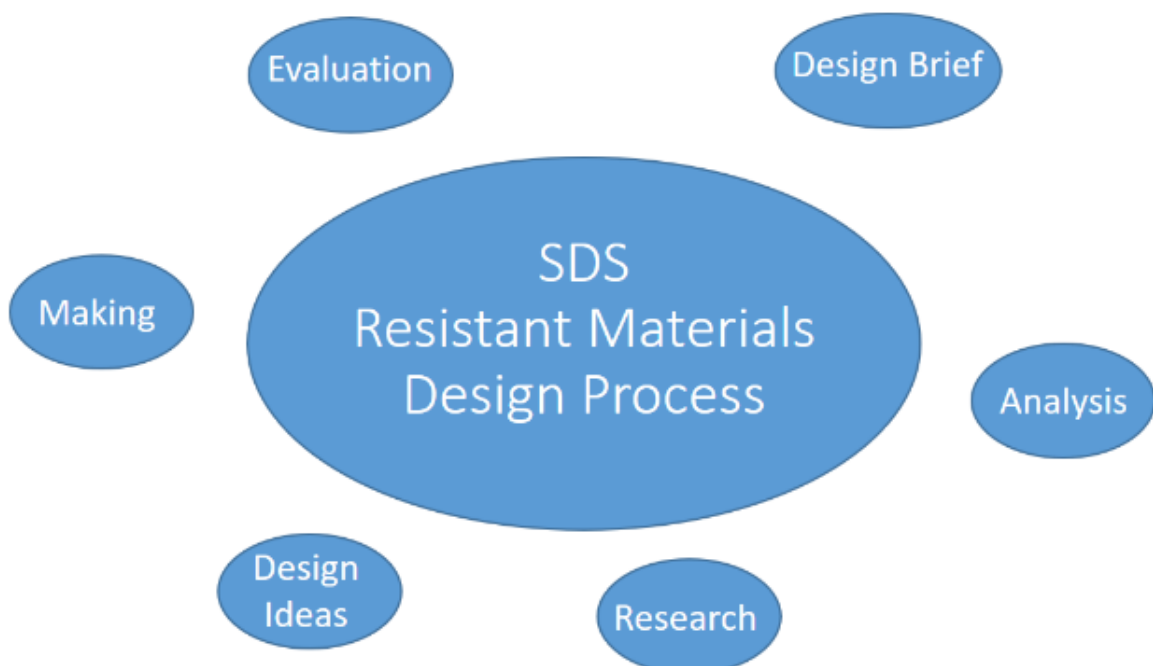
At Stony Dean School promoting independence and preparing students for employment are two major standards we look to promote and champion. Within the Resistant Materials department these principles underpin every project we undertake, every process and skill demonstrated.

Our curriculum exposes students to working with diverse materials, machinery and tools to give them an overall appreciation for the subject as well as instilling a sense of pride and satisfaction in their work upon project completion.

Implementation

The image below represents how we implement each project from its outset to completion:

- ✓ **Design Brief:** Sets out the parameters of the project e.g. what material needs to be used, what joints, processes need to be included etc.
- ✓ **Analysis:** We break down our brief specifying what must, should and could be included in our project.
- ✓ **Research:** Helps inform our design ideas by finding inspiration from our hobbies, interests and passions.
- ✓ **Design Ideas:** Create multiple initial designs and sketches to avoid tunnel vision before narrowing down our choices into one Final Design Idea.
- ✓ **Making:** Use diverse processes, tools, machinery and assembly methods in order to complete our projects.
- ✓ **Evaluation:** Reflect on the project we have created. What are we proud of and are there areas we could improve upon.



Lesson Breakdown

- In KS3 pupils receive 1 double lesson of Resistant Materials once a week on a carousel for 10- 13 weeks depending on the calendar year. This equates to 90 minutes' sessions per week.
- In KS4 pupil's students can choose Resistant Materials as an option. If they choose so, they receive 1 double lesson per week for the entirety of Year 10 & Year 11.
- In Foundation (16M) pupils receive 1 single lesson of Resistant Materials once a week for the whole school year. This equates to 45 minutes a week for a whole school year.

Impact

- Thorough opportunity to practice and hone skills prior to commencing their projects students will develop the ability to work independently.
- Students will become more creative and learn to problem solve throughout their project.
- Students will be made aware of opportunities to use these skills in future professions.
- Students will begin to grow a sense of pride in what they create and start to pay close attention to the accuracy and precision of various skills and techniques.
- Our students will enjoy lessons as the project prescribed are chosen with the student's interests and passions in mind.
- Students will be exposed to using CAD software in conjunction with machinery to further explore how technology can be used in this subject.

Pathways

Main focus of DT pathways is encouraging independence.	
Design & Technology - RM Pathway	Definition
Pathway 1	Students can follow instructions and adhere to health and safety rules.
Pathway 2	Students can choose an appropriate tool to use with support.
Pathway 3	Students can choose an appropriate tool, material and process independently. Students can showcase a level of accuracy in their work.
KS5 – BTEC Entry Level 1 in Pre-vocational Study	

Classroom Snapshot

