

KS3 COURSE OPTIONS

Course Title	Resistant materials
Course Description	<p>Students will:</p> <p>Design a grabber(litter picker), using research for inspiration</p> <p>Model the grabber design to ensure it will work with the grabber mechanism</p> <p>Design the handle of the grabber to make it ergonomic</p> <p>Make the complete grabber; trialling and improving it until it works.</p>
Course Content (Term 1,2,3 etc.)	<p>Students will learn about simple mechanisms and how to use modelling to test mechanisms</p> <p>Students will develop their understanding of Ergonomics and how to design a product to be ergonomic</p> <p>Students will develop their practical skills when working with wood, using a wide range of hand tools and machines.</p> <p>Students will develop their materials knowledge.</p> <p>Students will develop their ability to test, trial and improve their designs and practical work to ensure a successful outcome.</p>
Extra-Curricular Opportunities	n/a currently
Useful Websites	https://www.youtube.com/watch?v=E8RA9Kw_laE
Important Information	
Provision For Most Able	<p>Most able students can design and produce a grabber with more challenging mechanisms that requires the application of a thorough knowledge of lever mechanisms.</p> <p>Most able students are challenged to justify their design choices rather than just explain them.</p>
Assessment	<p>The students design work will be assessed 3 times during the module:</p> <p style="padding-left: 40px;">When they have designed and modelled the grabber head</p> <p style="padding-left: 40px;">When they have cut, shaped and decorated the grabber head</p> <p style="padding-left: 40px;">When they have designed the ergonomic handle.</p> <p>A Final design and make grade is assessed by pupil and teacher at the end of the module.</p>