



Subject	Year	Term
Design and Technology	8	1
Topic		
Systems and Metals		
Content (Intent)		
Prior Learning (Topic) Year 7 Food Preparation and Nutrition		
<p>Year 8 Design and Technology is a continuation of the work undertaken in Year 7, building on and extending the subject knowledge to introduce a new set of skills that enable students to become further involved and excited by the subject. The focus in Year 8 will be Systems and control and Design and Make activities using metals whilst making a light and a metal bug.</p>		
Future Learning (Topic) Y8 Food Preparation and Nutrition		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Students follow a varied curriculum that is focused on developing knowledge through practical work.</p> <ul style="list-style-type: none"> • An introduction to Mechanisms • Programmable robots • Electronics • Students will make an angle poised lamp. <p>Students will develop the ability to manufacture suitable outcomes in response to a brief.</p> <ul style="list-style-type: none"> • Identify the problem based on the design brief. • Design and manufacture a suitably sized metallic insect inspired by the film "A Bugs Life". • Develop workshop skills to manufacture a product accurately. <p>There is still an emphasis on developing subject knowledge of Health and Safety and materials, but this is done through application of the prior knowledge.</p>	<p>Assessment</p> <p>Several composite assessments will be used to move learning forward throughout the term. Students will be assessed on the Design and Technology, stands of assessment - Designing, Making and Evaluation. Using the Success Sheets, students will self-assess their work and be given directed lesson time to improve their outcomes. The teacher will then mark the piece. These composite assessments, along with the summative assessment test, will contribute to the summative report that is reported to parents.</p>	
How can parents help at home?		
<p>Students will be given homework every week and must complete this work in their exercise books. Discuss with your child how different systems work in the home.</p>		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
<p>Reading</p> <p>www.technologystudent.com https://designmuseum.org/</p>	<p>Vocabulary Lists</p> <p>Gears Pulleys Levers Programming Printed Circuit Board Resistor Switch</p>	<p>Light emitting diode Ferrous metals Non-ferrous metals Alloys</p>