

# Year 9

Subject   Design and Technology		
Intent for the Year		
<p>In year 9 D&amp;T continues to build on the technical knowledge and skills learnt in year 7 and 8.</p> <p>Pupils at Key Stage 3 follow the National Curriculum Programme of Study, which provides a broad background framework for all we do in Year 7, Year 8 and Year 9. Pupils work in well-equipped workshops and computer suites carrying out a range of design-and-make activities and focused practical tasks.</p> <p>Our curriculum is designed to encourage creativity, develop problem solving abilities and a general enthusiasm for designing and making – by ensuring we work with a wide range of materials in a variety of different contexts. Pupils are also encouraged to reflect on the wider impact of D&amp;T – for example, the sustainability of the materials they work with.</p> <p>Open-ended design tasks are often used to allow for maximum extension/challenge and maximum progress. Support is also given to enable all to engage, feel confident and achieve.</p>		
Topics Covered		
<p><b>Phone Holder:</b> A design project using CAD and Graphic skills. Practical work in: Timbers and Plastics.</p> <p><b>Technical Knowledge</b> Timbers: Industrial manufacture. Manufacture in school: woodworking hand skills Plastics: Industrial manufacture: Fractional distillation, injection moulding and extrusion Manufacture in school: Line bending, vacuum forming and plastic work hand skills One off, Batch production and mass production</p> <p><b>Paper engineering</b> Graphics: Industrial manufacture: Offset lithography die cut and deforming and laminating. Modelling and CAD skills. Mechanisms: V-shaped and layered</p> <p><b>Bird Box</b> Manufacture of plywood. CAD/CAM including laser cutting.</p>		
Parents/Carers can help by...		
<ul style="list-style-type: none"><li>• Talking to your child about the topics studied in class</li><li>• Encouraging to complete homework tasks</li><li>• Bring the correct equipment including: protractor, calculator and a sharp pencil.</li><li>• Do some DIY or craft at home with them!</li></ul>		
Useful Websites		
<p><a href="https://www.technologystudent.com/">https://www.technologystudent.com/</a> <a href="https://www.bbc.co.uk/bitesize">https://www.bbc.co.uk/bitesize</a> allsaints.dorset.sch.uk- Resources -Year 9-D&amp;T</p>		
Recommended Reading		
Book Title	Author	Brief Reasoning
How things Work	Conrad Mason	A fun and interactive way of learning
Make Electronics (3 <sup>rd</sup> Ed)	Charles Platt	Comes highly recommended
All-New woodworking for kids	Kevin McGuire	Practical projects you can make at home