

Design and Technology - Vision



DESIGN & TECHNOLOGY

»» Curriculum Intent

At St Paul's students participate in a range of design projects where they learn the following key skills

- Research
- Design
- Make
- Evaluate

In all of our projects students are challenged to demonstrate their understanding through a range of activities. As students progress through KS3, they will continue to build on and strengthen their ability in each area. We use students project work to assess their ongoing progress in this area.

»» Technical Principles

At St Paul's we deliver technical principles lessons covering the concepts below. In these lessons students will study the D&T content outlined by the KS3 National Curriculum and exam boards. They'll be challenged to consider how their learning fits in to 'The Big Concepts'. Students revisit these 'Big Concepts' each year as they progress through the curriculum. Their understanding in these areas is summatively assessed 3 times across the year.

The big concepts

The materials around us
Where do materials come from?

DT and our world
Energy Sources

Confidenc in drawing
Freehand sketching and presentation

How things work
Electronic Systems

Food Preparation and Nutrition
Eat well Guide and Hygiene

»» Subject Areas



Woods, Metals and Plastics



Fashion and Textiles



Food Preparation and Nutrition



Engineering Design



Graphics



Engineering Manufacture




CAD/CAM

We are all created in the image of God with a huge capacity for awe and wonder.



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Key Stage 3 & 4 Overview

	September - January	February - July
Year 7	<p>From September year 7 D&T students will start by learning the underpinning concepts of D&T. This foundation of learning will help them to access and enjoy their D&T lessons moving forward. During this time they will have the opportunity to explore all of the D&T subject areas. In January students will select their 3 most favoured subject areas. In February they will begin the 1st of 3 D&T rotations. Students complete one of these rotations in year 7 and two in year 8.</p>	<p>Begin 1st Subject Area</p>
Year 8	<p>In year 8 students will continue to complete their 2nd and 3rd rotation in D&T. Whilst doing so students will continue to develop their skills and understanding in designing, making and technical principles topics.</p> <p>In February students will be asked to select a specialist D&T subject to pursue from year 9 to year 11. All students at St Paul's pursue a D&T subject up to year 11.</p>  <ul style="list-style-type: none"> • OCR Design and Technology • OCR Cambridge National in Engineering Design • AQA Food Preparation and Nutrition 	<p>Begin 3rd Subject Area</p> <p>At this time students will be asked to select the specialist D&T area that they wish to pursue from year 9 to year 11. Students will rank the three subject areas they have studied in year 7 and 8 in order of most favoured to least favoured.</p>
Chosen D&T Specialism - Deepening Understanding, Knowledge and Skills		
Year 9	<p>Year 9 pupils are continuing in their studies in one subject area of Design and Technology. They can only study one of the subject areas already covered in Year 7 and Year 8. This allows pupils to achieve a depth of knowledge, understanding and a wide ranging skill base in preparation for study towards GCSE D&T, GCSE Food Preparation and Nutrition or OCR National (Engineering Design/Manufacture) in their subject area.</p> <p>In the OCR Cambridge National courses, students may begin units of coursework for their final qualification in the subject.</p>	<p>Assessment Methods</p> <p>Students technical principles knowledge will be assessed formatively over the course of the year and summatively during the Y9 PPEs.</p> <p>Students ability to Design, Make and Evaluate will be formatively and summative assessed. This could include verbal, written, peer and self assessment.</p>
Chosen D&T Specialism - Preparing for Y11		
Year 10	<p>By the time students have reached year 10 we hope that they have built a good level of skill and understanding in Design and Technology. Furthermore, students will have deepened their understanding of the skills and knowledge involved in their specialist D&T area.</p> <p>During year 10 we will start to look ahead and build momentum towards students completing work for their qualification. This involves students practising the skills required to be successful in the NEA and exam elements of our courses. Students will continue to revise and recall technical principles knowledge. Students will begin final examinations during the Pentecost term.</p>	<p>Assessment Methods</p> <p>Students technical principles knowledge will be assessed formatively over the course of the year and summative during the Y10 PPEs.</p> <p>Students ability to Design, Make and Evaluate will be formatively and summative assessed. This could include verbal, written, peer and self assessment.</p>
Achieving success in your D&T examinations		
Year 11	<p>By the time students begin Y11 they should be feeling confident about succeeding in their Design and Technology specialist area. This is when students need to put all of their previous learning into action.</p>	<p>Over the course of the year students will be completing on-going coursework projects (NEAs). Students will be balancing this alongside revision activities in preparation for their final exams.</p> <p>During year 11 it is essential that students use all of the resources that their teachers make available to them. Students will also need to keep a close eye on time and make sure they're meeting coursework deadlines.</p>