

## D&T 2024-2025

YEAR	Focus	Autumn 1 – 3 Lessons	Autumn 2 - 3 Lessons	Spring 1 - 3 Lessons	Spring 2 - 3 Lessons	Summer 1 - 3 Lessons	Summer 2 - 3 Lessons
7	Students will learn: Encourage all students to think of themselves as designers, to value the subject and their potential within it. Develop knowledge of a range of designing skills, making skills, evaluation skills and technical knowledge.	Communicating Designs – Drawing techniques, Isometric, Orthographic, Freehand. How do designers show their ideas?	Communicating Designs – Prototyping skills, Cardboard modelling – LEGO Minifigure.	Manufacturing – Timbers –BlockBot making project. Timbers Knowledge, Health & Safety, Cutting Skills.	Manufacturing – Timbers –BlockBot making project. Timbers Knowledge, Health & Safety, Cutting Skills.	Plastics – CAD / CAM Modelling. Digital Design Skills. LEGO Brick Keyring. 3D Printing process.	Plastics – CAD / CAM Modelling. Digital Design Skills. LEGO Brick Keyring. 3D Printing process.
	<b>Assessments:</b>	Baseline Assessment – basic knowledge & skills  Self/Peer Marked	Learning check 1: Drawing Techniques and Prototype test.		Learning check 2: Timbers Knowledge and Blockbot Evaluation.		Learning Check 3: CAD Tools and 3D printing process test.
	<b>Extra-Curricular:</b>	3D Printing Club & LEGO Robotics Club		3D Printing Club & LEGO Robotics Club		3D Printing Club & LEGO Robotics Club	
	<b>Home Resources:</b>	Teams – DT Extension tasks & Competitions.		Teams – DT Extension tasks & Competitions.		Teams – DT Extension tasks & Competitions.	
8	Students will learn: Apply knowledge and skills from year 7 to Design and Make Products. Broaden their knowledge of materials and processes. Explore the importance of design principles and sustainability.	Communicating Designs – Recycled Plastic product design challenge	Communicating Designs – Recycled Plastic product design challenge	Manufacturing – Timbers – Bird Box Challenge. Making a product to last – Timbers Knowledge. Joining skills.	Manufacturing – Timbers – Bird Box Challenge. Making a product to last – Timbers Knowledge. Joining skills.	Plastics – CAD / CAM – Laser cutting – Mobile Phone stand, Desk tidy. User-Centred Design project. Ergonomics.	Plastics – CAD / CAM – Laser cutting – Mobile Phone stand, Desk tidy. User-Centred Design project. Ergonomics.
	<b>Assessments:</b>		Learning Check 1: Plastic processes and Product Evaluation.		Learning Check 2: Timber Joins knowledge and Product Evaluation.		Learning Check 3: Research and Ergonomics knowledge test.
	<b>Extra-Curricular:</b>	3D Printing Club & F24 Greenpower Kit Car		3D Printing Club & F24 Greenpower Kit Car		3D Printing Club & F24 Greenpower Kit Car	
	<b>Home Resources:</b>	Teams – DT Extension tasks & Competitions.		Teams – DT Extension tasks & Competitions.		Teams – DT Extension tasks & Competitions.	
9	Students will learn: Strengthen & expand knowledge from year 7 & 8 to Design & Make.	Mock NEA Project – BIO Lamp Design  Students draw upon all of their KS3 learning to design & make a lamp with a recycled plastic		Mock NEA Project – BIO Lamp Design  Students draw upon all their KS3 learning to design & make a lamp with a recycled plastic shade. In the		Plastics – CAD / CAM – Pewter Jewellery – Laser cutting	

	Develop research informed decision making and independent designer skills.	shade. In the style of a GCSE Non-Exam Assessment students will put together a portfolio of design ideas and a Final prototype.	style of a GCSE Non-Exam Assessment students will put together a portfolio of design ideas and a Final prototype.	Mould making user CAD/CAM and Metal pouring process.	
	<b>Assessments:</b>		Learning Check 1: Portfolio check.	Learning Check 2: Final Evaluation	Learning Check 3: Summative Assessment
	<b>Extra-Curricular:</b>	3D Printing Club & F24 Greenpower Kit Car		3D Printing Club & F24 Greenpower Kit Car	3D Printing Club & F24 Greenpower Kit Car
	<b>Home Resources:</b>	Teams – DT Extension tasks & Competitions.		Teams – DT Extension tasks & Competitions.	Teams – DT Extension tasks & Competitions.
10 BTEC	OCR Engineering Design. RO39 NEA & RO38 Revision	Introduction to course and RO38 Content.	Introduction and begin RO39 Communicating Design Coursework	Completion of RO39 – Hand in June – Mock RO38	
	<b>Assessments:</b>		Learning Check 1: RO38 Knowledge test.	Learning Check 2: Coursework Mid Review	MOCK EXAMS: Mock RO38
	<b>Extra-Curricular:</b>				
	<b>Home Resources:</b>				
11 BTEC	OCR Engineering Design RO40 NEA & RO38 Final Exam	Introduction and begin RO40 NEA.	Completion of RO39 – Hand in June – Final Exam RO38.		
	<b>Assessments:</b>		MOCK EXAMS: Mock RO38	GCSE exams begin	
	<b>Extra-Curricular:</b>				
	<b>Home Resources:</b>				