ASSESSMENT OBJECTIVES	SUBJECT AREAS	PD1	PD2	F&N	TX	VC	PD	F&N	TX	VC	MT	PD	F&N	TX
AO1 Identify, investigate and outline design possibilities to address the needs and wants of the context.	RESEARCH & INVESTIGATION	•	•	•	•	•	•	•	•	•	•	•	•	•
	DESIGN SPECIFICATION	•	•		•	•	•	•	•	•	•	•	•	•
AO2 Design products that are fit for purpose, plan, test and model before manufacture of final product.	DESIGNING	•	•		•	•	•	•	•	•	•	•	•	•
	PLANNING & PROTOTYPE			•	•		•	•		•	•	•	•	•
AO3 Analyse, test and evaluate.	SOLVE DESIGN ISSUES	•	•		•		•	•	•	•	•	•	•	•
	TESTING & EVALUATION	•		•	•	•	•	•	•	•	•	•	•	•
AO4 Demonstrate understanding and apply knowledge and skills.	TECHNICAL PRINCIPALS IN DESIGING & MAKING	•	•	•	•	•	•	•	•	•	•	•	•	•
	THEORETCIAL UNDERSTANDING OF MATERIALS & PROPERTIES.		•			•	•	•	•		•	•	•	•
PRESENTATION														
LITERACY / QWC														

YEAR 7

First lesson of year 7 is completion of baseline test and treasure hunt tour of the department. Across the year, all students experience every aspect of DT and complete modules in all specialist areas through a range of projects. All of the projects allow for students to become familiar with the design process, from working to a brief and writing a specification to completing an evaluation and setting goals to improve / build on skills learnt.

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	SEPT 5TH – 20TH OCT	OCT 31ST – DEC 15TH	JAN 3RD – 9TH FEB	19TH FEB – 29TH MAR	APRIL 17TH – 25TH MAY	4TH JUNE – 23RD JULY
MODULE 1	PD 1: MECHANICAL TOY					

	• Woods / design focus. • Product analysis research • Design specification • Skill development in basic workshop processes in hand tools & machines. • Classification of woods • CAMS, mechanisms & movements			
MODULE 2		**PD 2: WIND CHIME** • Woods & polymers focus • Classification of polymers • Forming plastics & use of moulds • CAD / CAM designing • Possibility to add metals where time allows. • Completion of booklet, designing and making for brief.		
MODULE 3			**FOOD: INTRO TO FOOD & NUTRITION** • Intro to working in kitchen / food • Basic skills including use of hob, oven and knives safely • Hygiene and cleanliness in the kitchen • Introduction to basic food production • Foods include savoury and sweet dishes from bread and pizza to scones and biscuits. • Completion of skills booklet alongside weekly practical's.	
MODULE 4				**TEXTILES TECHNOLOGY: DRAWSTRING BAG** • Basic machine skills & driving test. • Simple construction, use of templates.

		• Development of stencils – safe use of scalpels • Safe use of irons • Design skills, testing and evaluation • Different Tie Dye techniques • Sewing equipment theory.

YEAR 8

Students have the choice of 4 option choices, completing 3 in order of their preference. Option choices are listed and completed across the year roughly in accordance with each term.

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	SEPT 5TH – 20TH OCT	OCT 31ST – DEC 15TH	JAN 3RD – 9TH FEB	19TH FEB – 29TH MAR	APRIL 17TH – 25TH MAY	4TH JUNE – 23RD JULY
	Option 1 **VIS COM: LEGO MAN** • Writing a brief & Specification • Higher level skills in woodwork using wider range of tools • Bore drilling using pillar drill • Design skills for product & packaging • Surface development (nets) • CAD simulation using Solidworks	**Option 2** **PD: BOARD GAME** • Writing brief & specification / user profile. • Technical drawing • Safe use of soldering • Electronics theory, symbols, resistors, circuits and PICs • Use of CAD to develop board game design	**Option 3** **F&N: AFTERNOON TEA** • Re-Introduce food rooms • Hygiene and cleanliness in the kitchen • Function of ingredients • Food investigations • Presentation of food • Afternoon Tea assessment **F&N: MULTI CULTURAL** • Plan, prepare and cook foods from across the globe – UK / Italy / Asia • Sauces, pasta, pastry • Completion of skills booklet alongside weekly practical's.	**Option 4** **TEXTILES TECHNOLOGY: CUSHION** **<u>Decorative techniques</u>** • Use of decorative techniques – applique, screen printing, sublimation printing, quilting, computer embroidery & laser etching • CAD: using Gimp to design • Writing a task analysis. Researching techniques, writing a specification and evaluating. **<u>Construction Skills</u>** • Accuracy of seam allowances for patchwork • Hemming and overlocking.	
MODULE 1	**CHOICE 1**					

MODULE 2		**CHOICE 2**	
MODULE 3			**CHOICE 3:**

YEAR 9

Students choose favoured specialist areas in year 8, and study a total of 2 specialist areas over the entire year. In each module, students complete two projects. Eg: in Visual communication, students will complete a merchandise project, and travel pack project over half a year.

	AUTUMN 1	**AUTUMN 2**	**SPRING 1**	**SPRING 2**	**SUMMER 1**	**SUMMER 2**
	SEPT 5TH – 20TH OCT	**OCT 31ST – DEC 15TH**	**JAN 3RD – 9TH FEB**	**19TH FEB – 29TH MAR**	**APRIL 17TH – 25TH MAY**	**4TH JUNE – 23RD JULY**
VIS COMM / GRAPHICS	**PROJECT 1: MERCHANDISE / EVENT** • Writing own brief in relation to given context • Researching using multiple sources and evaluation of research to form ideas • Product analysis • Planning own event & theme for project according to brief • Use of a range of processes and CAD / CAM – photoshop (gimp), logo development, poster design, sublimation printing, laser cutter and laminating. • Drawing techniques and principles • Typography and layouts • Colour theory • Creating a range of items with a cohesion to design across a range of processes and materials. • Understanding materials – boards/ papers/ polymers			**PROJECT 2: TRAVEL PACK** • Creation of brief for specific context and purpose • Researching using multiple sources and evaluation of findings to develop ideas for specific purpose • Product analysis • Planning project • Surface development, nets and appropriate design. • Conventions in packaging and packaging fit for purpose • Typography and layouts • Image manipulation • CAD – 2D design tools • Drawing methods – isometric, 2pt / 1pt perspective		
MATERIALS TECH	**PROJECT 1: PEWTER CASTING** • Metals theory			**PROJECT 2: SWEET DISPENSER** • Product design – use of plastics and woods to form a working product.		

	• Writing a brief & specification • Product analysis • Design ideas • Use of CAD / CAM to create mould for pewter cast • Safe use of pewter & H&S in the workshop when moulding metals – risk assessments • Extension activities relating to project.	• Writing a brief & specification • Product analysis • Research of customer, theme and existing products • Use of a wide range of tools and processes in workshop, from CAM to hand tools and machinery. • CAD 2D design • H&S in the workshop • Use of mechanisms
PRODUCT DESIGN	**PROJECT 1: SPEAKER PROJECT** • Component Knowledge including resistor colour codes, capacitors and LEDs • Research Target customer • Research theme • Research material • Design ideas – development and drawing skills. • Vacuum Forming • Gerbil Cutter • Soldering • Hot Glue Gun • 2DDT and Laser Cutter • Strip Heater	**PROJECT 2: MEDIA PLAYER** • Component Knowledge –ICs, LEDs • Research Target customer • Research theme • Research material • Design ideas – development and drawing skills. • Programming skills Circuit Wiz and genie ICs
FOOD & NUTRITION	**PROJECT 1: HEALTHY LIVING** • The Eatwell Guide and Basic Nutrition • Risk assessments • Function of ingredients • Ready Steady Cook • Sensory Analysis • Food investigations – fats in pastry • Special dietary Requirements - • Plan, prepare and cook foods that demonstrate healthy living • Completion of skills booklet alongside weekly practical's. • Great Bideford Bake off – Technical and Showstopper Challenge • Celebrations Project – extended project and Practical work •	
TEXTILES	**PROJECT 1: SOFT TOY**	**PROJECT 2: BUSY BOOK**

TECH	• Using or adapting a pattern and understanding pattern terminology. • Working with knitted, non-woven and woven fabrics. • Product analysis. • Writing a specification for a specific user. • Hand embroidery and applique skills • Flowchart skills.	**Decorative Techniques Technical Award Project.** • Understanding ways of decorating fabrics: Sublimation dyes, free machine embroidery, fabric paints, applique, trapunto, hand embroidery and Sublimation printing. • Making appropriate fabric choices. • Developing Creative design ideas for a child. • Tracking and evaluating techniques carried out.