



Design and Technology Curriculum Map 2022-23

	Year 7	Year 8	Year 9
Term 1			
Topic and Content	Drawing and Perspective	Magazine cover	Design and Make: Laser cut Lamp
Skills	<ul style="list-style-type: none"> ● Design needs and specification ● Planning and accuracy ● Woods and their properties ● Use of hand tools ● Design skills, templates and sketching ● Making skills ● Evaluation, testing and modification 	<ul style="list-style-type: none"> ● Task analysis, ● Practical modelling techniques, ● Research skills, ● Measuring ● Use of machinery and hand tools to cut and shape materials ● Joining materials and adhesives ● Evaluation, testing and modification 	<ul style="list-style-type: none"> ● Triangulation ● Struts and ties, gusset plates ● Building ● Modelling techniques ● Planning and cutting lists ● Measuring accurately ● Marking out and use of hand tools and machinery to cut and shape ● Practical making skills ● Joining and different adhesives ● Refine evaluate, testing

			and modification
Methods of Assessment	Assessment Objectives: Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives: Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives: Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.
Term 2			
Topic and Content	Design and Make: Spatula	Tangram	Forces
Skills	<ul style="list-style-type: none"> ● Design brief and mind maps ● Designing ● Making ● Combining materials ● Making ● Evaluation 	<ul style="list-style-type: none"> ● Introduction to 2 point perspective ● Design research ● Electronic components ● Line bending and shaping acrylic ● Shaping and accuracy ● Circuit building 	<ul style="list-style-type: none"> ● Frames research ● Tension and compression ● Loads and forces ● Levers ● CAD ● Fabrication and use of templates ● Building and joining techniques ● Testing and evaluation
Methods of Assessment	Assessment Objectives: Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives: Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives: Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.
Term 3			
Topic and Content	Plastic Key Ring	Container Project - Pencil Box - Finger joint+Lap Joint	Mechanisms - Cams and Levers

Skills	<ul style="list-style-type: none"> • Themed design and make project in plastic • Use of hand tools for cutting/shaping • Use of machinery for drilling • Peer evaluation 	<ul style="list-style-type: none"> • Design brief & specifications • Practical Research • Building • Testing and evaluating 	<ul style="list-style-type: none"> • Specifications • Practical research • Product analysis • Model making • Drawing • Manufacturing • Testing and evaluation • Modelling and rendering
Methods of Assessment	Assessment Objectives:Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives:Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives:Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.
Term 4			
Topic and Content	Bee Hotel - mix materials workshop project	CAD - Inventor	Bionics design
Skills	<ul style="list-style-type: none"> • Tools and equipment, safety, use of hand tools and machinery. Apply a finish. Design a lid and prepare the file for laser cutting. 	<ul style="list-style-type: none"> • Inventor software tools introduction • Modelling a project in Cad software • Design of the Lid in CAD and prepare the file for CAM (laser cut) 	<ul style="list-style-type: none"> • Tools and equipment,timbers, ratios, design styles,designing and evaluating.
Methods of Assessment	Assessment Objectives:Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives:Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.	Assessment Objectives:Design and Investigate, Making, Analyse and Evaluate and Technical Knowledge.