



DESIGN TECHNOLOGY (RESISTANT MATERIALS)

Year	Project	Knowledge	Assessment
7	Puppet	<ul style="list-style-type: none"> • Woods • Cutting and finishing wood • Surface developments • H&S in the workshop • Designing skills 	<ul style="list-style-type: none"> • Continual verbal feedback • 4 pieces of written feedback to students • Assessment through Q&A • Overall teacher comment
	Structures	<ul style="list-style-type: none"> • What is a structure? • Manmade and natural structures • Frame, shell and mass structures • Teamwork • Structural failure 	<ul style="list-style-type: none"> • Peer assessment • Testing bridges once built • Assessment through Q&A
8	Pacman light	<ul style="list-style-type: none"> • Electronic components • Soldering • Drawing skills – isometric and orthographic • CAD/CAM 	<ul style="list-style-type: none"> • Continual verbal feedback • 4 pieces of written feedback to students • Assessment through Q&A
	Door wedge	<ul style="list-style-type: none"> • Cutting and shaping wood • Joints 	<ul style="list-style-type: none"> • Peer assessment
	Landyacht	<ul style="list-style-type: none"> • Problem solving • Manufacture skills developed 	<ul style="list-style-type: none"> • Peer assessment • Verbal feedback
	Spin art	<ul style="list-style-type: none"> • Developing manufacture skills • Electronics 	<ul style="list-style-type: none"> • Peer assessment as part of team work.
9	Desk fan	<ul style="list-style-type: none"> • Learning about Alessi • Product analysis • Learning about polymers • Tools & equipment for working with polymers • Electronics 	<ul style="list-style-type: none"> • Continual verbal feedback • Q&A to assess • 4 pieces of marked work by teacher. • End of unit test.
	Wooden animals	<ul style="list-style-type: none"> • Manufacture techniques in wood 	<ul style="list-style-type: none"> • Verbal feedback
	Isometric drawing	<ul style="list-style-type: none"> • Developing isometric drawing skills 	<ul style="list-style-type: none"> • Assessment through verbal feedback.
	Casting	<ul style="list-style-type: none"> • Learn about pewter casting. • Learn how to shape and finish metal. 	<ul style="list-style-type: none"> • Assessment through verbal feedback.
10	Wooden box	<ul style="list-style-type: none"> • Hardwoods and softwoods • Manufactured boards 	<ul style="list-style-type: none"> • 3 pieces of written feedback • Continual verbal feedback
	Aluminium name tag	<ul style="list-style-type: none"> • Marking out metal • Cutting metal • Finishing metal • Letter stamping 	<ul style="list-style-type: none"> • 4 pieces of written feedback • Continual verbal feedback



	Coat hook	<ul style="list-style-type: none"> • Riveting metal • Bending metal • Dip coating • Energy sources 	<ul style="list-style-type: none"> • 5 pieces of written feedback • Continual verbal feedback
	Headphone stand	<ul style="list-style-type: none"> • Smart materials • CAD/CAM • Designers 	<ul style="list-style-type: none"> • 3 pieces of written feedback • Continual verbal feedback
	Mechanisms	<ul style="list-style-type: none"> • Motion and levers • Cams and followers • Gears • Mechanisms and maths 	<ul style="list-style-type: none"> • 8 pieces of written feedback • Continual verbal feedback
	Concrete tealight holders	<ul style="list-style-type: none"> • Composites • How to make concrete 	<ul style="list-style-type: none"> • 2 pieces of written feedback • Continual verbal feedback
	Revision box	<ul style="list-style-type: none"> • Papers and boards • Modern materials 	<ul style="list-style-type: none"> • 2 pieces of written feedback • Continual verbal feedback
	Phone holder	<ul style="list-style-type: none"> • Plastics • How plastics are made • Mill and lathe 	<ul style="list-style-type: none"> • 3 pieces of written feedback • Continual verbal feedback
	Anglepoise light	<ul style="list-style-type: none"> • New and emerging technologies • Developing practical skills • Combining different materials • Electronics 	<ul style="list-style-type: none"> • 5 pieces of written feedback • Continual verbal feedback
	NEA	<ul style="list-style-type: none"> • Design brief • Research & Specification • Design ideas 	<ul style="list-style-type: none"> • Continual verbal feedback • Ticklist to check progress.
11	NEA	<ul style="list-style-type: none"> • Selection and rejection of ideas • Development • Product manufacture • Working drawings • Testing and evaluating 	<ul style="list-style-type: none"> • Continual verbal feedback • Ticklist to check progress.
	Theory	<ul style="list-style-type: none"> • Forces and stresses • Plastics processes • Systems • Electronics systems • Textiles • Ecological and social footprint • Sustainable design • Scales of production • Technical textiles and materials properties definitions • Timber processes • Timbers conversion • Design process • Graphics skills 	<ul style="list-style-type: none"> • Weekly homeworks assessing theory with written feedback. • Test papers X12 February half term onwards • Continual verbal feedback

