

Curriculum (Subject) Overview



Believe, Succeed, Together

2018

YEAR 7 Design & Technology

	Autumn Term	Spring Term	Summer Term
Topics	1. Bridge Design Competition <ul style="list-style-type: none"> ✓ Structure & Physics ✓ Engineering ✓ Team Work ✓ Testing & Evaluation 2. Jacob's Ladder Project <ul style="list-style-type: none"> ✓ History ✓ Carpentry Skills ✓ Finishing Techniques ✓ Sequences 	3. Prototype Manufacture Product & Box <ul style="list-style-type: none"> ✓ Researching Techniques ✓ Oblique Sketching ✓ 1 Point Perspective ✓ Prototype Modelling ✓ Net Production ✓ Assembly Techniques ✓ Evaluating 	3. Soldering Project <ul style="list-style-type: none"> ✓ Circuits & Components ✓ Soldering ✓ Team Work ✓ Troubleshooting ✓ Branding
Assessment	<p>Their projects are assessed by teacher for quality of outcome, linking to GCSE criteria.</p> <p>They have a formal assessment relating to the first project based upon tools and manufacturing techniques experienced.</p>	<p>The Research area of this project will be assessed. The pupils' hand sketching designs will be assessed.</p> <p>The pupil will be individually assessed on the quality of outcome of their finish product & box.</p>	<p>The pupil will be individually assessed on the quality of outcome of their soldering.</p> <p>They will also have an end of year written assessment.</p>
Resources	<p>www.homemade-gifts-made-easy.com</p> <p>Edexcel GCSE (9-1) – Design & Technology By Edexcel</p>	<p>www.kidrobot.co.uk</p>	<p>www.kitronik.co.uk</p> <p>Key Stage 3 – Design & Technology by Peter Bull</p>

YEAR 8 Design & Technology

	Autumn Term	Spring Term	Summer Term
Topics	1. Paper Aeroplanes Competition <ul style="list-style-type: none"> ✓ Instructions ✓ Forces/Aerodynamics ✓ Testing & Evaluating 2. Door Signs <ul style="list-style-type: none"> ✓ Computer Aided Designs ✓ Laminating ✓ Manufacturing ✓ Fastenings 	3. Printed Product <ul style="list-style-type: none"> ✓ Sketching ✓ Computer Aided Design ✓ Printing Techniques 4. Clock Project (Design) <ul style="list-style-type: none"> ✓ Market Research ✓ 3D sketching ✓ Prototyping ✓ Pattern/Template 	5. Clock Manufacture (Make) <ul style="list-style-type: none"> ✓ Measuring/Making ✓ Processes ✓ Assembling ✓ Finishing Techniques 6. Character Top Trump Game <ul style="list-style-type: none"> ✓ Sketching ✓ Rendering ✓ Creative Writing
Assessment	Assessment on computer aided design tools.	The pupil will be individually assessed on the quality of designs and computer applications used. The Research area of this project will be assessed. The pupils' hand sketching clock designs will be assessed.	The pupil will be individually assess final product against GCSE grading criteria. They will also have an end of year written assessment.
Resources		www.megauk.com/sublimation Key Stage 3 – Design & Technology by Peter Bull	www.dckids.com Edexcel GCSE (9-1) – Design & Technology By Edexcel

YEAR 9 Design & Technology

	Autumn Term	Spring Term	Summer Term
Topics	1. Duct Tape Wallet/Purse <ul style="list-style-type: none"> ✓ Market Research ✓ Design ✓ Prototyping/Template ✓ Manufacture ✓ Evaluating 2. Theory Introduction Core Knowledge <ul style="list-style-type: none"> ✓ Materials ✓ Production Methods ✓ Fabrics & Textiles 	3. Jewellery Box (Group & Individual) <ul style="list-style-type: none"> ✓ Prototyping ✓ Manufacture ✓ Adhesives ✓ Evaluating 4. Theory Knowledge Timbers <ul style="list-style-type: none"> ✓ Types of Timbers ✓ Wood joints & Fastenings ✓ Environmental Factors ✓ Design Question 	5. Mechanism Investigation <ul style="list-style-type: none"> ✓ Levers ✓ Pulleys ✓ Gears ✓ Mechanisms 6. Team Presentation on Theory <ul style="list-style-type: none"> ✓ Team Work ✓ Select theory area ✓ Create resources ✓ Deliver to class
Assessment	The pupil will be individually assess final product against GCSE grading criteria.	Mock Examination formal assessment ½ of real GCSE exam.	Groups are assessed on the approach and outcome of their presentation on theory area. Mock Examination formal assessment final ½ of real GCSE exam.
Resources	www.wikihow.com Edexcel GCSE (9-1) – Design & Technology By Edexcel	Edexcel GCSE (9-1) – Design & Technology By Edexcel	Edexcel GCSE (9-1) – Design & Technology By Edexcel

YEAR 10 Design & Technology

	Autumn Term	Spring Term	Summer Term
Topics	1. Bottle Branding & Design Project <ul style="list-style-type: none"> ✓ Research ✓ Specification ✓ Branding ✓ Product Analysis ✓ Design ✓ Prototype ✓ Manufacturing Processes 2. Theory Knowledge (Core) <ul style="list-style-type: none"> ✓ Materials ✓ Production Methods ✓ CAD/CAM ✓ Communication Techniques ✓ Branding 	3. Architecture Project <ul style="list-style-type: none"> ✓ Research ✓ Inspirational Designers ✓ Specification ✓ Testing & Evaluation ✓ Designing ✓ Prototyping 4. Theory Knowledge (Timbers/Graphical) <ul style="list-style-type: none"> ✓ Mechanisms ✓ Equipment/Tools ✓ Joints/Fastening ✓ Design Question ✓ Renewable Energies 	5. Non Examined Assessment (NEA) <ul style="list-style-type: none"> ✓ Specified by title release from exam board ✓ Will have to go through a project in 8 months through the whole design/make process. ✓ Research ✓ Specifications ✓ Initial Designs ✓ Initial Prototype
Assessment	Mock formal Exam Assessment on the previous year exam. Project will be assessed against GCSE criteria.	Project will be assessed against GCSE criteria.	Project will be continually assessed against GCSE criteria.
Resources	Edexcel GCSE (9-1) – Design & Technology By Edexcel	Edexcel GCSE (9-1) – Design & Technology By Edexcel	Edexcel GCSE (9-1) – Design & Technology By Edexcel

YEAR 11 Design & Technology

	Autumn Term	Spring Term	Summer Term
Topics	1. Continuation of NEA <ul style="list-style-type: none"> ✓ Review of Designs ✓ Prototyping Materials ✓ Developed Design ✓ 2nd Prototype ✓ Review of Selected Design ✓ Final Manufacturing of Model 2. Theory Knowledge (Timber/Graphics) <ul style="list-style-type: none"> ✓ Manufactured Boards ✓ Environmental Impact ✓ Finishing Techniques ✓ Paper & Board ✓ Manufacturing Techniques ✓ Tools & Components 	3. Continuation of NEA <ul style="list-style-type: none"> ✓ Manufacturing Storyboard ✓ Testing ✓ Evaluation 4. Theory Knowledge (Core) <ul style="list-style-type: none"> ✓ Composites ✓ Energy Sources ✓ Properties ✓ Design Strategies ✓ Revision 	5. Exam Preparation
Assessment	Mock formal Exam Assessment on the previous year exam. NEA will be continually assessed against GCSE criteria.	NEA will be continually assessed against GCSE criteria.	Exam Preparation
Resources	Edexcel GCSE (9-1) – Design & Technology By Edexcel	Edexcel GCSE (9-1) – Design & Technology By Edexcel	Edexcel GCSE (9-1) – Design & Technology By Edexcel