

SUBJECT: Design Studies



KS3 CURRICULUM PLAN 2021-22

KS1 and 2 Knowledge and Key skills

YEAR 7	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPIC	<i>Workshop Safety/ Coat Hook</i>	<i>Workshop Safety/ Coat Hook</i>	<i>Design /make</i>	<i>Design/make</i>	<i>Block bots</i>	<i>Block bots</i>
Knowledge	Students will be introduced to workshop safety and the safe use of machines and hand tools.	Students will be introduced to workshop safety and the safe use of machines and hand tools.	Students will develop skills required to design and make a series of short one off tasks.	Students will develop skills required to design and make a series of short one off tasks.	Students will use skills and knowledge gained to use the design process to make and evaluate a wooden block bot figure/toy	Students will use skills and knowledge gained to use the design process to make and evaluate a wooden block bot figure/toy
Skills	Measuring and marking out using workshop equipment to improve accuracy.	Measuring and marking out using workshop equipment to improve accuracy.	Develop an understanding of the design process. With a focus on :problem solving,reflecting and evaluating	Develop an understanding of the design process. With a focus on :problem solving,reflecting and evaluating	Develop skills of research to produce a detailed specification that fulfils a brief and be able to evaluate a product against this.	Develop skills of research to produce a detailed specification that fulfils a brief and be able to evaluate a product against this.
Key Vocab	Construct, function, material, millimetre, hazard, control measures	Construct, function, material, millimetre, hazard, control measures	Influence,aesthetics,	Product,specification, refine,realise	Function,form,	Accuracy,review, properties

KS1 and 2 Knowledge and Key skills

YEAR 8	SUMMER 2	SUMMER 1	SPRING 2	SPRING 1	AUTUMN 2	AUTUMN 1
TOPIC	<i>Bug House/ Lighting</i>	<i>Bug House/ Lighting</i>	<i>Design/make</i>	<i>Design/make</i>	<i>Lighting / Bug House</i>	<i>Lighting /Bug House</i>
Knowledge	Students follow the design process to produce design ideas for making a product based on the environment and the natural world.	Students follow the design process to produce design ideas for making a product based on the environment and the natural world.	Students study aesthetics in response to the brief/ theme set by their teacher	Students will be introduced to electronics and different 2D/ 3D drawing techniques. They will be able to identify and understand what a brief is and be able to respond to a set brief .	Students follow the design process to produce design ideas for making a product	Students study aesthetics in response to the brief/ theme set by their teacher
Skills	2D drawing techniques , 3D drawing skills. Working with recycled materials to creatively make a product.	Analytical skills related to form and function .Analysis of components and materials fit for purpose.	Analytical skills related to form and function ,what is the relationship between the two?	Drawing for different purposes. Understanding the ideas of developing ideas ,creating ,plans and recording from different viewpoints	2D drawing techniques , 3D drawing skills. Working with recycled materials to creatively make a product.	Analytical skills related to form and function .Analysis of components and materials fit for purpose.
Key Vocab	Shape,form, prototype.	climate change	Aesthetics,proportion,balance, scale.	Electronics,resistor,capacitor.	Fabrication,feedback,testing, realising, refining.	Form,function.

Key Knowledge Transfer

YEAR 9	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPIC	<i>Litter Picker/ Clocks</i>	<i>Litter Picker/ Clocks</i>	<i>Litter Picker/ Clocks</i>	<i>Litter Picker/ Clocks</i>	<i>Litter Picker/ Clocks</i>	<i>Litter Picker/ Clocks</i>
Knowledge	Students will be introduced to different 2D and 3D drawing techniques. They will be able to identify and understand what a brief is and be able to respond to a set brief .	Students follow the design process to produce design ideas for making a product	Students study aesthetics in response to the brief/ theme set by their teacher	Students will be introduced to different 2D and 3D drawing techniques. They will be able to identify and understand what a brief is and be able to respond to a set brief .	Students follow the design process to produce design ideas for making a product	Students study aesthetics in response to the brief/ theme set by their teacher
Skills	2D drawing techniques , 3D drawing skills. Potential to use CAD/CAM. Problem Solving	Students develop practical and CAD making skills. Exploring mechanical applications and learning new manufacturing practices. Using appropriate joining methods, ensuring they are fit for purpose	Students complete their projects in response to the brief, using appropriate methods to ensure they realise their intentions, making decisions that match their aesthetic and functional intentions.	2D drawing techniques , 3D drawing skills. Potential to use CAD/CAM. Problem Solving	Students develop practical and CAD making skills. Exploring mechanical applications and learning new manufacturing practices. Using appropriate joining methods, ensuring they are fit for purpose	Students complete their projects in response to the brief, using appropriate methods to ensure they realise their intentions, making decisions that match their aesthetic and functional intentions.
Key Vocab	Brief,CAD,CAM,response, problem solve	Review,refine,joining/testing,fit for purpose.	Evaluate,review,reflect.	Brief,CAD,CAM,response, problem solve	Review,refine,joining/testing,fit for purpose.	Evaluate,review,reflect.