KS3 Curriculum Overview

Plan for 2023/24

BASELINE

The aim of the baseline is to assess the current skills of the students. Focusing on the core skills needed across Product Design. Looking at:

- Rendering: Colouring with tone – a basic skill which is needed for communication of ideas.
- Measuring: Using a ruler, understanding that there are 10mm in a 1cm, how to measure accurately.
- Drawing in 3D (Oblique Project): Oblique projection is a simple type of technical drawing of graphical projection used for producing two-dimensional images of three-dimensional objects. Drawing the front view, adding 45-degree projection lines, measuring along the projection lines, then connecting the points up and adding additional detail. This is a key skill used to communicate ideas through the years.

POP UP *(done with year 9 due to them doing a baseline)*

Pop Up Cards allows students to demonstrate the core skills in a practical way applying it to a product. The students get to think about designing for a client, and an event and how that influences a product. While exploring how you can manipulate paper to get a high-quality product.

In this project they will be assessed on how well you can:

- Work of others
- Rendering
- Material – paper
- Developing a product for a client and event
- Test, evaluate and refine their ideas
- Simple mechanical systems – of pop-up techniques

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PHONE STAND – TEXTILES

Introduction to textiles, looking at the core skill of measuring, accuracy and being able to safely use machinery. This will be delivered under the **Design Brief:** Primark want to increase their range of 'impulse buy' products that are positioned by the cash desks. You have been asked by the company to design a repeat pattern to be printed onto fabric and then used to make a Phone Stand. You have been asked to use an up-coming trend for inspiration for the fabric designs on the theme of World Cultures. The design will be printed onto fabric and will be used to manufacture a stand for a smartphone.

In this project they will be assessed on how well you can:

- Develop design criteria for your Phone Stand
- Research imagery from other cultures and use it as inspiration for a block printed repeat pattern
- Use textile equipment accurately and safely
- Accurately print fabric their own fabric
- Measuring with patterns and seam allowance.
- Setting up and using sewing machines
- Evaluate your Phone Stand against your design criteria and suggest improvements
- Cultures (world cultures inspired
- Materials – fabric felt and cotton natural

DAY OF THE DEAD – TEXTILES

A development of textiles skills, looking at developing the core skill of measuring, accuracy and being able to safely use machinery. This will be delivered under the **Design Brief:** All about Día de los Muertos (Day of the Dead.) Day of the Dead is the English name for the Mexican festival Día de los Muertos. It is a celebration during which the dead are honoured. Surprisingly, it is not a sombre and miserable time, but a time of happiness and memories. You have been asked to design and make a The Day of the Dead cushion which could be sold to teenagers. You will need to investigate and research what Day of the Dead is and how it will influence your work. It will need to be made from more than one fabric and will need to use a range of techniques such as embroidery and applique. You will need to explore what the techniques and which techniques are suitable for your design.

In this project pupils will be assessed on how well they can:

- Research Day of the dead and produce a research board
- Produce a range of Skull ideas
- Develop skills by producing Applique and Machine embroidery sample
- Refine and Develop a final idea based on skills development
- Use textile equipment accurately and safely to produce a Skull cushion

Mini GCSE style project

WOODEN BOX – 3D PRODUCT

The design brief for this project is to design a standard lock box that holds a variety of small items, such as pencils. That the construction of the Lockbox will be made from Plywood. Plywood is a manmade wood and recognisable by its layers. The box will be joined with butt joints. This is used because it is a suitably strong joint to hold the sides of the box together.

In this project they will be assessed on how well you can:

- Measuring
- Needs of a client – linked to a specification (user centred)
- Materials – timbers
- Obliques projection for ideas
- Evaluations

NIGHT LIGHT

- Input / output of electronic

KS3 Curriculum Overview

	Year 7			Year 8			Year 9		
	Baseline	Phone Stand	Gift in a Box	Pop Up	Day of the Dead	Night Light			
Design									
use research and exploration, such as the study of different cultures, to identify and understand user needs			green		green				
identify and solve their own design problems and understand how to reformulate problems given to them				green	orange				
develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations			green	green					
use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses		green	green	orange	orange				
develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools	green		green	green	green				
Make									
select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture		green	green	green	green				
select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties		green	green	green	green				
Evaluate									
analyse the work of past and present professionals and others to develop and broaden their understanding		orange		green					
investigate new and emerging technologies									
test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups			green	green					
understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists									
Technical knowledge									
understand and use the properties of materials and the performance of structural elements to achieve functioning solutions		orange	orange						
understand how more advanced mechanical systems used in their products enable changes in movement and force				orange					
understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs]									
apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers].									