

# Yr 7 Design and Technology – The British School

## Curriculum overview

Term 1	Term 2	Term 3	Term 4
<b>Foundation</b> <b>Introduction to the workshop, materials and tools</b> <b>Design and Make: Candle holder, exploring construction joints</b>	<b>Foundation</b> <b>CAD CAM TinkerCAD Mini Maze</b>	<b>Foundation</b> <b>Design and Make: Bauhaus clock, exploring acrylics</b>	<b>Foundation - Extension</b> <b>Design and model: Structures and forces</b>
<p>Students will undertake a practical baseline assessment.</p> <p>Students will research and create a mood board on wooden candle holders, style, material and design. They will create some sketches of L shaped candle holders, learning how to develop a range of design ideas using sketching and drawing. Students are learning how to draw basic shapes accurately freehand and as well how to create and apply a range of rendering techniques to create a realistic 3D form.</p> <p>Students will investigate a range of materials for this product and analyse which one is the most appropriate. They will gain an understanding of different types of timber (Hard wood, soft wood, manufactured wood etc).</p> <p>They will gain an understanding of wastage, accuracy and marking of finger joints. Students will learn about health and safety in the workshop (PPE), a range of workshop tools: Coping saw, Tenon saw, Flat File, Bandfacer, Scroll saw and Pillar drill.</p> <p>Students will learn about aesthetics: staining, oiling, varnishing, waxing, painting and laminating.</p> <p><b>Acrylic extension: Students will create either a Tihar inspired design to be etched onto acrylic and decorated in a complementary colour.</b></p>	<p>Students will undertake a practical baseline assessment.</p> <p>Students will be introduced to 1 and 2 point perspective drawing in order to draw a maze. Starting with squares and moving on to more complex shapes, they will produce a series of designs independently.</p> <p>Students will learn how to create a model using TinkerCAD, the stages will be modelled. The pupils will produce a stl file and create a 3D Print. We will discuss the use of rapid prototyping within design and sustainability features.</p> <p>Whilst the stl files are printing, students will design an acrylic topper for their mazes which will be laser cut. We will discuss the importance of tolerances and sizes and also communicate the different coloured lines for use on the 3D printer.</p> <p>Students will construct their maze and add a keyring and follow it with an evaluation of the task.</p>	<p>Students will learn about key design movements of 20th century: Art Deco, De Stijl, Memphis and Bauhaus. Students will learn about the key works, artists and designers.</p> <p>Students will investigate and look at examples of ‘form over function’ and ‘function over form’ and start designing a wall handling timepiece. They will learn how to develop a range of design ideas using sketching and drawing, they will be encouraged to create designs, using basic geometric shapes and a primary colour palette and muted tones.</p> <p>Students will create a paper collage using the basic shapes, they will measure and learn how to describe and record dimensions. They will create, shape and cut from the dimensions from their collage.</p> <p>Students will learn about <b>health and safety</b> in the workshop, will learn about different families of timber and the tools needed to make a good product.</p> <p>Students will be taught about wastage and marking, (PPE), a range of workshop tools: Coping saw, Flat File, Bandfacer, Scroll saw and Pillar drill.</p>	<p>Students will explore the principles of forces and how materials respond to stress and strain. They will apply this understanding by working collaboratively in teams to design and construct a bridge that meets a specific design brief and set performance criteria. Material availability will be intentionally limited, encouraging students to use resources efficiently and make thoughtful, sustainable design decisions.</p> <p>Students will also investigate how buildings and structures are engineered to withstand natural disasters. Using this knowledge, they will evaluate and test their own structural designs against a range of realistic conditions and challenges.</p> <p>Throughout the project, students will develop key teamwork, communication, and project management skills while working collaboratively to plan, design, and refine their ideas. They will gain practical experience in accurate model-making using card and a variety of modelling materials, alongside learning safe and responsible workshop practices. This includes the correct use of craft knives and an understanding of relevant health and safety procedures.</p>
<b>Artists/Design/Movements: Tihar, Traditional festivals, Interior design, Product design</b>	<b>Artists/Design/Movements: Rapid prototyping, CAD CAM</b>	<b>Artists/Design/Movements: Art Deco, Bauhaus, De Stijl</b>	<b>Artists/Design/Movements: Architecture and buildings. Suspension bridges, roofs and structures.</b>
<b>Domains</b> Knowledge, Design, Explore, Analyse, Make and Evaluate, Technical knowledge	<b>Domains</b> Knowledge, Explore, Analyse, Make and Evaluate	<b>Domains</b> Knowledge, Design, Explore, Analyse, Make and Evaluate, Technical knowledge	<b>Domains</b> Knowledge, Design, Explore, model, test, teamwork
<b>Concepts:</b> <b>Research, 2 Points perspective, Timber, Design, Health and Safety</b>	<b>Concepts:</b> <b>Research, Filament, Design, CAD/CAM, Health and Safety</b>	<b>Concepts:</b> <b>Plastic, design movements, Health and safety</b>	<b>Concepts:</b> <b>Forces and structures, health and safety, project management</b>

<p><b>Opportunities for developing the 5Cs</b>  Creativity: Design a product, DOTD symbol, colour scheme.  Confidence: Develop a design into a final piece - realising intentions  Compassion: Understanding of ritualism, ceremony and culture  Community: Discussion of work, peer and group written feedback. Links to Spanish and MFL  Challenge: Accuracy, Manipulation of material and tools</p>	<p><b>Opportunities for developing the 5Cs</b>  Creativity: Design a product to a brief, a mini maze to keep someone occupied  Confidence: Develop a design into a final piece via CAD CAM - realising intentions via rapid prototyping  Compassion: Understanding of product design, sustainability and benefits of prototyping  Community: Discussion of work, peer and group written feedback. Links to sustainability  Challenge: Translating a 2D drawing into a 3D form</p>	<p><b>Opportunities for developing the 5Cs</b>  Creativity: Clock design and iterations  Understanding of Bauhaus Line, Shape and Symmetry within Design.  Confidence: Develop a design into a final piece - realising intentions  Compassion: Understanding of Design movements, Form over function design, peer reflection and feedback.  Community: Discussion of work, peer and group written feedback. Links to humanities  Challenge: Translating a 2D into 3D form. Use of machinery and tools</p>	<p><b>Opportunities for developing the 5Cs</b>  Creativity: Aesthetically pleasing bridge design and model  Confidence: Test and trial out ideas and concepts  Compassion: Understanding how buildings and structures can be designed to protect people during natural disasters.  Community: Working in a team to solve problems and design and make a model that works.  Challenge: Understanding how to test and model correctly to get something that works, managing and working in a team.</p>
<p><b>Assessment Opportunities:</b>  Candle holder will be self and teacher assessed.  Students will be assessed on a weekly basis during the duration of the project. Baseline assessment, Initial designs, Accuracy of manufacture,</p>	<p><b>Assessment Opportunities:</b>  Mazes will be self and teacher assessed and tested with friends to allow for collaborative feedback. Baseline assessment. Design and creativity, complexity of the maze, drawing work.</p>	<p><b>Assessment Opportunities:</b>  Bauhaus clock will be self and teacher assessed.  Students will be assessed on a weekly basis during the duration of the project. Initial designs, Accuracy of manufacture and understanding of design movements.</p>	<p><b>Assessment Opportunities:</b>  Bauhaus clock will be self and teacher assessed. Teams will present their bridges at the end of the unit which will be given both peer and teacher feedback.  Students will be given verbal feedback throughout the process.</p>
<p><b>Literacy Opportunities:</b>  S&amp;L- Self/Peer/ Group evaluation, Targeted questions.  Written: Letter writing, sentence and paragraph structure, Slide presentation in form of a design portfolio.  Reading- - Key words, theory on design movements, materials, design factors, Health and safety booklet.</p>	<p><b>Literacy Opportunities:</b>  S&amp;L- Self/Peer/ Group evaluation, Targeted questions.  Written: Evaluation and sentence starters. Slide presentation in form of a design portfolio.  Reading- - Key words, learning through tutorials, materials, Health and safety booklet.</p>	<p><b>Literacy Opportunities:</b>  S&amp;L- Self/Peer/ Group evaluation, Targeted questions.  Written: Letter writing, sentence and paragraph structure, Slide presentation in form of a design portfolio.  Reading- - Key words, theory on design movements, materials, design factors, Health and safety booklet.</p>	<p><b>Literacy Opportunities:</b>  S&amp;L- Self/Peer/ Group evaluation, Targeted questions.  Written: Presentation skills and script writing. Presenting a portfolio of work, annotations and labelling.  Reading- - Key words, theory of structures and forces.</p>
<p><b>Health and Safety - Hand tools, pillar drill, belt sander, laser cutter</b>  <a href="#">CLEAPPS</a></p>	<p><b>Health and Safety - 3D printer, laser cutter, hand tools</b>  <a href="#">CLEAPPS</a></p>	<p><b>Health and Safety - Acrylic cement, sanding, belt sander, pillar drill, handheld drill, scroll saw</b>  <a href="#">CLEAPPS</a></p>	<p><b>Health and Safety - Craft knives</b>  <a href="#">CLEAPPS</a></p>

# Yr 8 Design and Technology – The British School

## Curriculum overview

Term 1-2	Term 3	Term 4	Extension
<p><b>Design and make: Textiles, cultural tote bags</b></p>	<p><b>Technical drawing skills. Designing and modelling robots.</b></p>	<p><b>Technical modelling: Physical and digital</b></p>	<p><b>Design and make: Slot together animal pencil pots.</b></p>
<p>At the start of the project students are introduced to textiles as a material and the difference between fibres and fabrics. The project will be introduced and students given a brief and specification to work to. Students will be introduced to the sewing machine, how to thread it and basic stitches that they will require. They will be shown the health and safety and given step by step instructions for using the equipment. Throughout the projects, students will be introduced to different pieces of equipment within textiles such as pins, needles, marking chalk and be shown how to apply decoration to their tote bag.</p> <p>Students will be asked to design bags based on traditional dhaka repeating patterns and will also be shown how to correctly cut out patterns from a template. They will be shown how to use tailors chalk and fabric scissors to create a neat edge.</p> <p>Decoration will include tie dye, applique, block printing and machine stitching. Students will be given demos for these and then can choose which ones are most suited to their project. The laser cutter will also be used to cut out shapes on fabric which all interlock, students will be shown how this works.</p> <p>Once decoration of the bags is complete, students will be shown how to construct the bag, starting with making the handles and neatening the seams using hems. They will be shown the 'right sides together' technique and taught about seam allowance before turning their handles inside out to create a neat edge. They will also be shown how to use an iron to neatly press seams. After this, students will pin and stitch the handles onto each side of the bag using a strengthening stitch pattern and understand why this is used. The bag will be stitched together using a 1.5cm seam allowance, turned inside out and loose threads removed. These skills help with fine motor skills and prepare students for future projects in the workshop. It also opens them up to a new material and the opportunities that come with it.</p> <p>Students will evaluate their finished design against the specification they were supplied with and gain peer feedback.</p>	<p>In this project, students begin by learning how to communicate design ideas through <b>orthographic and isometric drawing</b>. They are introduced to the purpose and importance of these drawing styles in real-world design and manufacturing. Students explore how orthographic drawings show multiple flat views of an object, while isometric drawings present a 3D visual to communicate depth and form. These drawing methods help students understand how to clearly translate an idea into a <b>technical visual language</b> that others can read and use to build from. Students will choose a design movement to base their robot on and will need to create a mood board to help them with the designs.</p> <p>Students will design a robot inspired by a design movement using <b>orthographic and isometric drawing</b>.</p> <p>Students use <b>traditional drawing tools</b>, such as <b>set squares, T-squares, compasses, and technical pencils</b>, to create their designs accurately by hand. They learn the correct drawing process and techniques for achieving clean, consistent lines and measurements. A key part of the process is the <b>differentiation of lines</b>, including construction lines, object lines, hidden lines, and centre lines. Students are taught how to apply these line types effectively so their work follows a professional standard and can be interpreted by others within a design context.</p> <p>Throughout the drawing activities, students are introduced to the application of <b>British Standards</b> in technical drawing. These standards ensure that their work is clear, accurate, and suitable for production or further development. Understanding British Standards also helps students appreciate the need for consistency and precision in design communication. By the end of the unit, students will have produced a set of orthographic and isometric drawings that demonstrate their ability to <b>plan, structure, and visually present a design</b> using industry-recognised drawing conventions.</p>	<p>Students will use their orthographic drawings from the previous term to model their object in cardboard. They will be shown how to use the craft knives safely and to cut effectively on a cutting board. Wastage and cutting from straight edges will also be emphasised. Students will also be shown how to use various joining methods such as tape, double sided and masking, the glue gun and pritt stick. Students will be encouraged to model hinges and moving parts as shown on their artefact.</p> <p>In this project, students are introduced to <b>Onshape</b>, a professional level CAD software used to create 3D models and technical drawings. The project begins with learning how to navigate the software, start new files, and create accurate 2D sketches using traditional shapes and dimensioning tools. Students then explore the <b>extrude</b> and <b>revolve</b> functions to transform their sketches into 3D forms, helping them understand how real-world objects are built from digital designs.</p> <p>As skills develop, students apply more advanced tools like <b>fillet, chamfer, and emboss</b>, refining their models with smooth curves, angled edges, and decorative text. They also learn how to combine separate parts using the <b>assembly environment</b>, applying constraints to position and align components correctly. These tools build confidence in producing detailed and functional models that mirror the processes used in industry. In the final weeks, students focus on producing professional <b>working drawings</b>, converting their 3D models into orthographic views with accurate dimensions. They extend this by learning how to create <b>section views</b> to reveal internal features and <b>exploded isometric views</b> to show assembly order. By the end of the unit, students will have completed a set of technical drawings and a fully modelled assembly, gaining a strong foundation in CAD design and real-world engineering communication.</p> <p>There will also be emphasis put on good file management and therefore improving the students computer literacy skills.</p>	<p>In this project, students will be introduced to CAD/CAM and the ways it can be used to construct items with accuracy and precision. Students will use animals as the base for their biomimicry inspired pencil holder and be expected to collect a series of images to use as reference.</p> <p>Students will be shown how to draw their pieces on infinity designer so that they can be slotted together once cut. Tolerance will be discussed as a term and students will be shown how to accurately allow for the laser beam tolerance. They will also be shown how to adjust the line colours so that the laser knows when to cut and when to engrave.</p> <p>Students will be given a demo of how the laser cutter works to recap on the learning from Term 1. They will be showed the correct safety steps and features so that they have a good understanding for Year 9. Once the pieces have been cut out, students will be able to glue their pieces together and apply a variety of finishes depending on their preference. This could include oil, wax or paint.</p> <p>Students will be asked to test the product to ensure it functions correctly and all of the pieces are the correct size.</p>
<p><b>Artists/Movements:</b> Traditional Dhaka repeating patterns</p>	<p><b>Artists/Movements:</b> Product design, design movements (choice)</p>	<p><b>Artists/Designers/Movements:</b> Design movements - choice</p>	<p><b>Artists/Designers/Movements:</b> Biomimicry</p>

<b>Domains</b> Knowledge, Making skills, Evaluation, Idea generation	<b>Domains</b> Knowledge, Making skills, Evaluation, Idea generation	<b>Domains</b> Knowledge, Making skills, Evaluation, Idea generation	<b>Domains</b> Knowledge, Making skills, Evaluation, Idea generation
<b>Concepts:</b> Printmaking and relief printing, applique, tie dye, Composition, Colour theory, manufacture using a sewing machine.	<b>Concepts:</b> Designer research, orthographic projection, using inspiration, accurate design drawings.	<b>Concepts:</b> Prototyping and modelling, on shape, accuracy, file management, engineering drawings	<b>Concepts:</b> Biomimicry, 2D design, laser cutter, surface treatments.
<b>Assessment in Design &amp; Technology is ongoing throughout the year and will focus on the ability and command of the formal elements: Design, Analyse, Make, Evaluate and Technical knowledge. , with several opportunities to demonstrate progression of skills. Students are required to demonstrate creative input as well as to make connections with the work of other designers when required. In addition to teacher assessment, there will be opportunities for self-evaluation and peer assessment at regular intervals.</b>			
<b>Opportunities for developing the 5Cs</b> Creativity: Design a traditional print for bags, working with shape colour and pattern. Confidence: Develop a design into a final piece - realising intentions, becoming confident with the sewing machine and what it is used for. Learning new tools and equipment and how to use them. Compassion: Understanding of ritualism, ceremony, culture and tradition. Community: Discussion of work, peer and group written feedback. Learning about peer's cultures through traditional clothing. Challenge: Understanding colour theory, shape, drawing, new skills, materials and processes.	<b>Opportunities for developing the 5Cs</b> Creativity: Draw from imagination. Understanding of Pattern, Line, Shape and Symmetry. Coming up with creative ideas and functions of the robot Confidence: Develop a design into a final piece - realising intentions Compassion: Links with careers and why this type of drawing is important. Community: Discussion of work, peer and group written feedback. Helping each other to understand and testing out each others designs. Challenge: Understanding how to draw a 3D object in 2D and make it accurate enough for someone else to model.	<b>Opportunities for developing the 5Cs</b> Creativity: Model from an existing drawing. Understanding colour, form and construction. CAD designs. Confidence: Develop a design into an accurate model. Compassion: Working in pairs to help each other, using the 6 B's. Community: Discussion of work, peer and group written feedback. Links to careers and why we use Challenge: Translating a 2D into 3D form using physical and digital modelling techniques. .	<b>Opportunities for developing the 5Cs</b> Creativity: Design ideas and CAD Design Confidence: Working digitally to create ideas Compassion: Understanding of health and safety. Community: Discussion of work, peer and group written feedback. Working within a workshop Challenge: Create a biomimicry design. Shaping and modelling of product using CAD.
<b>Assessment Opportunities:</b> <b>Baseline assessment</b> Cultural research Colour theory, shape, pattern and tessellation. Mood boards, digital portfolio	<b>Assessment Opportunities:</b> Baseline assessment Using existing designs as inspiration Accuracy of the finished drawings	<b>Assessment Opportunities:</b> Baseline assessment Onshape model Physical model	<b>Assessment Opportunities:</b> Baseline assessment Moodboards and inspiration The finished model with accuracy and joining techniques completed well.
<b>Literacy Opportunities:</b> S&L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Letter writing, sentence and paragraph structure, Evaluation, Lexicon for ACCESSFM Reading- - Key words, Starter sentences, Lexicon for Mood, Technique, Formal Elements	<b>Literacy Opportunities:</b> S&L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Letter writing, sentence and paragraph structure, Evaluation, Lexicon for ACCESSFM Reading- - Key words, Starter sentences, Lexicon for Mood, Technique, Formal Elements	<b>Literacy Opportunities:</b> S&L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Letter writing, sentence and paragraph structure, Evaluation, Lexicon for ACCESSFM Reading- - Key words, Starter sentences, Lexicon for Mood, Technique, Formal Elements	<b>Literacy Opportunities:</b> S&L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Letter writing, sentence and paragraph structure, Evaluation, Lexicon for ACCESSFM Reading- - Key words, Starter sentences, Lexicon for Mood, Technique, Formal Elements
<b>Health and Safety</b> <a href="#">CLEAPPS</a>	<b>Health and Safety</b> <a href="#">CLEAPPS</a>	<b>Health and Safety</b> <a href="#">CLEAPPS</a>	<b>Health and Safety</b> <a href="#">CLEAPPS</a>

# Yr 9 Design and Technology – The British School

## Curriculum overview

Term 1	Term 2	Term 3	Term 4
<b>Live brief - Product for the school shop/Chitwan National Park</b>	<b>Live brief - Product for the school shop/Chitwan National Park</b>	<b>Multiway storage box</b>	<b>CAD Onshape/tinkercad and 3D printing</b>
<p>This project is designed to mirror the IGCSE process in that students will be working to a real brief with an outcome. The teamwork element ensures that all students have equal opportunity to participate, learn teamwork skills and also develop as a designer. Students will be working in groups to create research, designs, presentations and models for a live brief set internally by the DT department. Students work to a live brief where they will be designing and prototyping a product to be sold in the TBS shop or Chitwan National park shop in order to raise money for community partners. All students in the group will take part in research, client interviews, designing, testing and modelling, thus shadowing a GCSE project and developing the skills needed for further study. They will also assign category managers to ensure the project stays on track.</p> <p>Initial lessons within the scheme of work will involve a task analysis, looking at what is currently sold, the cost and the successes. They will be introduced to the difference between primary and secondary research and how to gather data effectively. Students will also create mood boards to give them inspiration for their designs. They will also be shown the difference between a mood board and a structural inspiration board. They will analyse products using ACCESS FM to understand them and learn to be critical.</p> <p>Students will discover eco-friendly materials through their own research and will also learn to test their products with real people, allowing them to make adjustments where needed. They will understand the commercial viability of products and why they would be popular in stores. They will produce initial and finalised sketches for their designs using 2 point perspective, isometric and orthographic.</p>	<p>During this project, students will be encouraged to think outside of the box, work in a team and respond quickly to problems that might occur in or outside of the team. They will develop autonomy over their decisions and become problem solving designers. They will also develop the skills to be able to sell an idea to a client base and work on costings for their projects, understanding profit and loss</p> <p>Students will produce design boards alongside a presentation to show the whole journey from start to finish. This will include research, costings, design ideas, development, testing and packaging if relevant.</p> <p>All students will be expected to present their ideas and pitch their project to the rest of the class in order to decide on a couple of projects to be put forward to a school community vote. The aim is that we will try to get the final designs manufactured in Nepal so they can be sold to raise money.</p>	<p>This project involves the design and fabrication of a multiway storage box that explores a variety of construction techniques and manufacturing processes. The aim is to create a functional and visually engaging storage solution, while developing hands-on skills in CAD design, laser cutting, vacuum forming, and mechanical joining.</p> <p>Students will be introduced to the project through a brief with the intention of upskilling them to multiple techniques. They will be asked to create a moodboard that represents them in order to offer inspiration for their project. Students will use ACCESS FM to analyse 3 existing products and understand how to think critically about products on the market, mirroring the expectations for the IGCSE. Students will design their box using 2 point perspective drawing techniques and hand rendering to represent the colours they choose. Annotation will also be a focus to ensure students understand the importance of this within a design journey. Ideas will be cross checked against the brief and specification and adapted and changed depending on the outcome.</p> <p>The top of the lid will be cut using the laser cutter out of acrylic, teaching students another CAD technique and building from previous years, the external sections of the box will be made using a variety of joins including a finger joint, half lap and dowel joint. This will expose students to various fastening techniques and ensure their health and safety is maintained in the workshop.</p> <p>Students will be introduced to the vacuum former and the process involved, linking to key theory within the IGCSE specification. Students choose a design to use as a vac form for the inside of their boxes depending on their needs, wants and values.</p> <p>Once construction of the box is complete, students will choose how to finish the external parts of their box, they can choose from oil, wax or paint depending on their design ideas.</p> <p>Students will be asked to evaluate and test their box with other students in the class and to form critical analysis in order to improve next time.</p>	<p>Students will use Onshape or tinkercad to design and 3D print the handle for their box</p> <p>This project involves designing and modelling the handle for the box they have build in the previous term. Students will be introduced to Onshape, a cloud-based CAD software. The goal is to create a small, functional, and printable object that demonstrates both creativity and alignment with their previous design.</p> <p>Students will be introduced to the 3D printing process and how to set up their files correctly and to ensure they have no overhangs or small parts which may break off easily.</p> <p>Extension: Students shown how to create engineering drawings of their designs in order to produce industry ready production drawings using the correct standards and annotation.</p> <p>Students will be shown the basics of Onshape and how to model and create shapes that work together. They will be introduced to the model tree and how to keep a tidy and organised workspace.</p>
<b>Artists/Designers/Movements: Existing products, promotional material, commercial viability</b>	<b>Artists/Designers/Movements: Existing products, promotional material, commercial viability</b>	<b>Artists/Designers/Movements: Personal style</b>	<b>Artists/Designers/Movements: CAD, Onshape</b>
<b>Domains Knowledge, Making skills, Evaluation, Idea generation</b>	<b>Domains Knowledge, Making skills, Evaluation, Idea generation</b>	<b>Domains Knowledge, Making skills, Evaluation, Idea generation</b>	<b>Domains Knowledge, Making skills, Evaluation, Idea generation</b>

<p><b>Concepts:</b> Live brief, research, Design Ideas, CAD CAM, prototyping, presentations, pitching, materials costings</p>	<p><b>Concepts:</b> Live brief, research, Design Ideas, CAD CAM, prototyping, presentations, pitching, materials costings</p>	<p><b>Concepts:</b> Human factors, Design Ideas, Point perspective, CAD CAM, Final product.</p>	<p><b>Concepts:</b> Sketch, Extrude, Revolve, sweep, loft, assemble</p>
<p><b>Assessment in Design &amp; Technology is ongoing throughout the year and will focus on the ability and command of the formal elements: Design, Analyse, Make, Evaluate and Technical knowledge. , with several opportunities to demonstrate progression of skills. Students are required to demonstrate creative input as well as to make connections with the work of other designers when required. In addition to teacher assessment, there will be opportunities for self-evaluation and peer assessment at regular intervals.</b></p>			
<p><b>Opportunities for developing the 5Cs</b> Creativity: Sketching, design and development of own product. Confidence: Design and construction of form, use of concrete as a material. Compassion: Understanding Brutalist Design, Modernist Architecture and Sustainability. Community: Discussion of work, peer and group written feedback. Challenge: Understanding form, shape and negative relief.</p>	<p><b>Opportunities for developing the 5Cs</b> Creativity: Sketching, design and development of own product. Confidence: Design and construction of form, use of concrete as a material. Compassion: Understanding Brutalist Design, Modernist Architecture and Sustainability. Community: Discussion of work, peer and group written feedback. Challenge: Understanding form, shape and negative relief.</p>	<p><b>Opportunities for developing the 5Cs</b> Creativity: Sketching, design and development of own product. Confidence: Working on a design brief, designing and analysing the task. Compassion: Understanding Human Factor, Materials and Sustainability. Community: Discussion of work, peer and group written feedback. Challenge: Understanding line, shade, shape, colour theory and multiple perspectives. Spatial awareness and design cycle.</p>	<p><b>Opportunities for developing the 5Cs</b> Creativity: Creating an object using CAD Onshape Confidence: Extruding and Assembly of an object. Compassion: Understanding CAD functions and actions Community: Discussion of work, peer and group written feedback. Challenge: Understanding Sketch, Extrude, Dimensions, Revolve and Fillet, Chamfer, Embossed and Assembly. Spatial awareness.</p>
<p><b>Assessment Opportunities:</b> Baseline design ideas Research and design ideas Presentation and pitch session Materials and costings</p>	<p><b>Assessment Opportunities:</b> Baseline design ideas Research and design ideas Presentation and pitch session Materials and costings</p>	<p><b>Assessment Opportunities:</b> Mood board 1 A4 Pages of existing product research. 2 A4 pages of design ideas in two point perspective. 3D modelling of product using CAD CAM Final product and workshop skills</p>	<p><b>Assessment Opportunities:</b> Understanding of Sketch, Extrude, Dimensions, Revolve and Fillet, Chamfer, Embossed Accurate assembly of 3D model</p>
<p><b>Literacy Opportunities:</b> S&amp;L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Letter writing, sentence and paragraph structure, Evaluation, Lexicon for ACCESSFM Reading- - Key words, Starter sentences, Lexicon for Mood, Technique, Formal Elements</p>	<p><b>Literacy Opportunities:</b> S&amp;L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Letter writing, sentence and paragraph structure, Evaluation, Lexicon for ACCESSFM Reading- - Key words, Starter sentences, Lexicon for Mood, Technique, Formal Elements</p>	<p><b>Literacy Opportunities:</b> S&amp;L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Letter writing, sentence and paragraph structure, Evaluation, Lexicon for ACCESSFM Reading- - Key words, Starter sentences, Lexicon for Mood, Technique, Formal Elements</p>	<p><b>Literacy Opportunities:</b> S&amp;L- Self/Peer/ Group evaluation, Literacy Foci, Targeted questions, TESMC Written: Understanding key words and how these link to the drawing module. Evaluating and testing work against the brief. Reading- - Key words, Starter sentences</p>
<p><b>Health and Safety: Glue guns, sewing machines, craft knives, hand tools.</b> <a href="#">CLEAPPS</a></p>	<p><b>Health and Safety: Glue guns, sewing machines, craft knives, hand tools.</b> <a href="#">CLEAPPS</a></p>	<p><b>Health and Safety: Hand tools, pillar drill, handheld drill, sanding, belt sander, disc sander, glue, laser cutting, scroll saw, clamps.</b> <a href="#">CLEAPPS</a></p>	<p><b>Health and Safety: 3D printer</b> <a href="#">CLEAPPS</a></p>