

Design & Technology Curriculum Aims



Intent of KS3 Curriculum:

Design and Technology is a perfect example of head and hands working together. For pupils, having to think about specific purposes and users for their products is much more demanding than simply following instructions to make something. Pupils have to think, decide and plan, as well as go and create.

Through studying Design and Technology through a wide variety of activities and processes, pupils use of a broad range of knowledge, skills and understanding which helps prompt engagement and nurtures creativity and innovation. They design and make functional products that solve real and relevant problems through a range of contexts via an array of different materials. It encourages pupil's to think about important issues and explore the designed and made world in which we all live and work.

Some of the benefits of studying Design and Technology

1. How to be creative
2. How to solve real problems
3. Learn skills that to can be used in a future job
4. Learn about materials, processes and tools
5. Learn about the effect of products on the environment & people
6. Make and manipulate things with different materials
7. Learn practical skills that can help yourself
8. Apply knowledge from other subjects
9. Make a finished product to take home and be proud of

Through the curriculum pupils go through the design process in order to acquire and apply knowledge and understanding of materials and components, design skills, existing products, practical skills, quality and health and safety.

The skills learned in D&T also help with learning across the curriculum. Knowledge about the properties of materials helps in science and the practice of measuring accurately helps in maths. These skills help in IT through the pupils use of computers and naturally, in art and design.

Design and Technology provides opportunities for pupils to develop their capability. By combining their design and making skills with knowledge and understanding they learn to create quality products.

D&T brings learning to life. It is a motivating context for discovering literacy, mathematics, science, art, PSHE and ICT.

Pupils are exposed to the design process to develop their practical, designing and creative ability to solve real and relevant problems within a variety of contexts.

This is achieved through three Design & Technology subject areas:

- **Resistant Materials/Product Design**
- **Textiles**
- **Graphics**

Through evaluation of past and present Design and Technology, pupils will develop a critical understanding of its impact on daily life and the wider world around them.

Implementation of Skills & Concepts:

Students enter KS3 with a mixed variety of existing skills due to the differing amount of exposure in KS2. Within the first lessons students are taught the key health and safety expectations whilst in the design and technology department. Health and safety is paramount and students are consistently reminded of the expectations whilst in the subject area. Students have to sign a health and safety contact at the start of each new rotation cycle in order for them to carry out practical work in that subject area.

Skills are delivered through the following subjects on a rotation of 8 week blocks:

- **Resistant Materials/Product Design**
- **Textiles**
- **Graphics**

Impact

The Design and Technology Department will assess the impact of key concepts, skills and content throughout the year via regular assessments, marking and student feedback, book scrutiny and learning walks. This will be evident through the department QA folder and department tracking document (found within the department shared drive).

In order to support literacy, the pupil's booklets contain key words (as well as on the teaching power points) as well as key literacy tasks built into each project booklet.

As the pupils rotate their marks are recorded on to the department tracking sheet and an average mark is awarded for each project. Over the course of the year a clear picture of their progress can be seen.

In year 9 pupils will build upon some of the key skills techniques and knowledge already learned, but will also be introduced to new skills techniques and knowledge in order to fully prepare them for their options choice.

Through the evaluation of past and present Design and Technology, they develop a critical understanding of its impact on daily life and the wider world. Pupils learn how to take risks, becoming resourceful, innovative, enterprising capable citizens.

High-quality Design and Technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Design & Technology Curriculum Aims



4 Week Rotation	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8
Learning Aims	<ul style="list-style-type: none"> -Understand the health and safety requirements when working in a workshop environment -Understand the Design Brief and Key words associated 	<ul style="list-style-type: none"> -Begin Sanding down the pine wood base, working on the quality of finish -Begin your plastic background information 	<ul style="list-style-type: none"> -Drill main hole in the wooden base -Sand the edge of the hole smooth -Complete your Plastic information page 	<ul style="list-style-type: none"> -Begin working on the final quality of finish on the piece of acrylic (pre-cut to size) -Begin drawing out an orthographic drawing of the night light with the design you want laser cutting into the plastic. 	<ul style="list-style-type: none"> -Have your design laser cut onto the piece of acrylic -Complete working on the final quality of finish of your acrylic 	<ul style="list-style-type: none"> -Begin soldering the components for the night light together 	<ul style="list-style-type: none"> -Finish soldering the components for the night light together -Assemble your night light together and apply a final finish to the wood. -Test to ensure the product works 	<ul style="list-style-type: none"> Assemble your night light together and apply a final finish to the wood. Test to ensure the product works -Feed forward based on teacher assessment
Learning outcomes	<ul style="list-style-type: none"> -Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work is not accurate -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct tools -Use tools correctly and safely -Select all the correct tools & equipment -Select some of the correct Techniques & Processes -Select the correct Techniques & Processes -Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work is not accurate -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct tools -Use tools correctly and safely -Select all the correct tools & equipment -Select some of the correct Techniques & Processes -Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work is not accurate -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct tools -Use tools correctly and safely -Select all the correct tools & equipment -Select some of the correct Techniques & Processes -Select the correct Techniques & Processes 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work is not accurate -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct tools -Use tools correctly and safely -Select all the correct tools & equipment -Select some of the correct Techniques & Processes -Select the correct Techniques & Processes 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work is not accurate -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct tools -Use tools correctly and safely -Select all the correct tools & equipment -Select some of the correct Techniques & Processes -Select the correct Techniques & Processes 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work is not accurate -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct tools -Use tools correctly and safely -Select all the correct tools & equipment -Select some of the correct Techniques & Processes -Select the correct Techniques & Processes 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work is not accurate -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct tools -Use tools correctly and safely -Select all the correct tools & equipment -Select some of the correct Techniques & Processes -Select the correct Techniques & Processes -Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions
Required Skills	<ul style="list-style-type: none"> -Understand the hazards in a workshop environment and how to avoid them. -Keeping themselves and others in the room safe -Definitions and explanations -Expository writing 	<ul style="list-style-type: none"> -How to sand and finish a piece of wood correctly and safely -Keeping themselves and others in the room safe 	<ul style="list-style-type: none"> -How to sand and finish a piece of wood correctly and safely -How to use and operate the Pillar Drill -Keeping themselves and others in the room safe -Definitions and explanations -Expository writing 	<ul style="list-style-type: none"> -How to sand and finish a piece of plastic correctly and safely -Draw accurately -How to mark and measure out accurately -Keeping themselves and others in the room safe 	<ul style="list-style-type: none"> -How to transfer CAD onto the laser cutter -How to mark and measure out accurately -Keeping themselves and others in the room safe -Keeping themselves and others in the room safe 	<ul style="list-style-type: none"> -How to correctly solder components together -How to use the soldering iron safely -Keeping themselves and others in the room safe -Keeping themselves and others in the room safe 	<ul style="list-style-type: none"> -How to correctly solder components together -How to use the soldering iron safely -Keeping themselves and others in the room safe -Keeping themselves and others in the room safe 	<ul style="list-style-type: none"> -How to correctly solder components together -How to use the soldering iron safely -Keeping themselves and others in the room safe -Keeping themselves and others in the room safe -Definitions and explanations -Expository writing
Skills & content revisited	<ul style="list-style-type: none"> -Understand the health and safety requirements when working in a workshop environment 	<ul style="list-style-type: none"> -Working on the quality of finish on materials 	<ul style="list-style-type: none"> -Operating the Pillar drill -Working on the quality of finish on materials 	<ul style="list-style-type: none"> -How to add tone to a drawing -How to add presentation techniques to drawings to make them stand out -How to mark our and measure correctly using cm & mm 	<ul style="list-style-type: none"> Working on the quality of finish on materials 	N/A	N/A	N/A
Assessment	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback 	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback 	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback 	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback 	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback 	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback 	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback 	<ul style="list-style-type: none"> Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback Photo of finished work
Literacy	<ul style="list-style-type: none"> Acrylic Design 	<ul style="list-style-type: none"> Quality Appearance Thermo Setting Thermo Plastic Plastic Polymer Translucent Transparent Opaque Pine wood 	<ul style="list-style-type: none"> Quality Appearance Thermo Setting Thermo Plastic Plastic Polymer Translucent Transparent Opaque Pine wood 	<ul style="list-style-type: none"> Quality Appearance Self-Finish 	<ul style="list-style-type: none"> Laser cutting Self-Finish C.A.D Process C.A.M 	<ul style="list-style-type: none"> Flux Soldering Iron L.E.D Solder 	<ul style="list-style-type: none"> Quality Appearance Thermo Setting Thermo Plastic Plastic Polymer Translucent Transparent Opaque Pine wood 	<ul style="list-style-type: none"> Quality Appearance Thermo Setting Thermo Plastic Plastic Polymer Translucent Transparent Opaque Pine wood

Design & Technology Curriculum Aims



<p>Num</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>Marking out and measuring in mm using a steel rule</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	
<p>Year 9 - Resistant Materials –Plastic (acrylic) Night Light: Aims and background of the Project</p>									
<p>Resources</p>	<ul style="list-style-type: none"> To enable pupils to understand what the subject of Resistant Materials is. To give pupils experience in working in a practical environment with tools and materials they have not used before. To gain health and safety knowledge of working in a practical environment Gaining a basic understanding of the properties of Plastic 	<p>Booklet, pens, pencils, literacy mats, teacher P.T to support learning</p>	<p>Booklet, Grades of sandpaper, Bees wax, pins</p>	<p>Grades of sand paper, Pencils, Ruler colour pencils.</p>	<p>To allow pupils to build further their practical skills • To allow pupils to express themselves creatively. • To encourage independent and resilient learners</p>	<p>Laser cutter, Grades of sand paper.</p>	<p>Soldering iron, solder, flux, connector blocks, Colour changing L.E.D, Hot glue gun</p>	<p>Soldering iron, solder, flux, connector blocks, Colour changing L.E.D, Hot glue gun , Booklet, Green pens</p>	

Design & Technology Curriculum Aims

Graphic Design – Shop front design



4 Week Rotation	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8
Learning Aims	<ul style="list-style-type: none"> - Understand the 7 formal elements of graphic design. - Identify how colours can influence a target market. 	<ul style="list-style-type: none"> - Understand what a brand is. - Apply knowledge of branding to design ideas for a range of shop logos. 	<ul style="list-style-type: none"> - Produce a creative design idea for the shop front. - Link design ideas to colour swatches, target markets and 7 formal elements. 	<ul style="list-style-type: none"> - Produce a creative design idea for the shop front. - Link design ideas to colour swatches, target markets and 7 formal elements. 	<ul style="list-style-type: none"> - Understand the advantages and disadvantages for using CAD/CAM. - Understand the basic CAD tools needed to draw out a shop front design. 	<ul style="list-style-type: none"> - Understand more complex CAD tools and apply them to drawing a more complex CAD model. - Apply rendering and materials to the CAD model. 	<ul style="list-style-type: none"> - Understand more complex CAD tools and apply them to drawing a more complex CAD model. - Apply rendering and materials to the CAD model. 	<ul style="list-style-type: none"> - Understand what a concept board is and why it is used in design. - Create a concept board to show the CAD designs which have been produced.
Learning outcomes	<ul style="list-style-type: none"> - Identify the key elements of good design and links to target markets. - Explore which elements of good design can be applied when appealing to the target market. - Justify why your target market would be drawn to your design proposals due to the effectiveness of good colour choices. 	<ul style="list-style-type: none"> - Explain what makes a brand and create a simple logo design. - Explore where colour can be used in a range of logo designs to create a brand identity. - Create a variety of original logo using justified colour choices and considering where negative space can be applied. 	<ul style="list-style-type: none"> - Use colour in the design of your shop front to draw in the target market. - Explore where form can be used to make the design idea more appealing to the target market. - Consider the how the inside of the shop could link to the exterior façade to further appeal to the target market. 	<ul style="list-style-type: none"> - Use colour in the design of your shop front to draw in the target market. - Explore where form can be used to make the design idea more appealing to the target market. - Consider the how the inside of the shop could link to the exterior façade to further appeal to the target market. 	<ul style="list-style-type: none"> - Create a Trimble ID and use basic 3D modelling tools in CAD. - Create a Trimble ID and use a range of 3D modelling tools in CAD with little assistance. - Create a Trimble ID and use a wide range of 3D modelling tools in CAD independently. 	<ul style="list-style-type: none"> - Use basic 3D modelling tools in CAD to draw out a simple shop front design. - Use a range of 3D modelling tools to draw out an interesting shop front design in CAD with little assistance. - Use a wide range of 3D modelling tools to draw out a complex shop front design in CAD independently. 	<ul style="list-style-type: none"> - Use basic 3D modelling tools in CAD to draw out a simple shop front design. - Use a range of 3D modelling tools to draw out an interesting shop front design in CAD with little assistance. - Use a wide range of 3D modelling tools to draw out a complex shop front design in CAD independently. 	<ul style="list-style-type: none"> - Apply simple sentences to a basic concept board alongside your CAD images. - Explore how your CAD images can be used alongside detailed sentences to explain your design to the target market. - Explore how your CAD images can be incorporated in a visually stimulating way to engage the intended target market.
Required Skills	<ul style="list-style-type: none"> - Blending tone. - Identifying colour against a target market. - Exploration skills to show understanding of new key terms. 	<ul style="list-style-type: none"> - Creativity producing design ideas. - Drawing, mark making and applying detail. - Tone and blending colour. 	<ul style="list-style-type: none"> - Drawing, mark making and applying detail to designs. - Tone and blending colour. - Creativity. - Drawing some sections in 3D for higher ability. 	<ul style="list-style-type: none"> - Drawing, mark making and applying detail to designs. - Tone and blending colour. - Creativity. - Drawing some sections in 3D for higher ability. 	<ul style="list-style-type: none"> - Basic computer skills. - Ability to follow a process to allow students to create a login. - Translating 2D sketches in to 3D shapes. - Working out how to manipulate shapes and adapt them to suit the design. - Creating a safe online account and password. 	<ul style="list-style-type: none"> - Basic computer skills. - Ability to follow a process to allow students to create a login. - Translating 2D sketches in to 3D shapes. - Working out how to manipulate shapes and adapt them to suit the design. - More complex computer skills to apply colour and texture. 	<ul style="list-style-type: none"> - Basic computer skills. - Ability to follow a process to allow students to create a login. - Translating 2D sketches in to 3D shapes. - Working out how to manipulate shapes and adapt them to suit the design. - More complex computer skills to apply colour and texture. 	<ul style="list-style-type: none"> - Identifying which areas are most relevant to a target market. - Transfer images across CAD programs. - Layout skills for communication - Basic and more complex computer skills.
Skills & content revisited	<ul style="list-style-type: none"> - Blending tone - Identifying a target market - Key words 	<ul style="list-style-type: none"> - Blending tone - Design ideas - Annotation - Key words 	<ul style="list-style-type: none"> - Design ideas - 2D drawing - Typography - 3D drawing for more able - Colour theory 	<ul style="list-style-type: none"> - Design ideas - 2D drawing - Typography - 3D drawing for more able - Colour theory - Annotation - Key words 	<ul style="list-style-type: none"> - Basic computer skills - Taking images from 2D to 3D - CAD modelling 	<ul style="list-style-type: none"> - Basic computer skills - Taking images from 2D to 3D - CAD modelling 	<ul style="list-style-type: none"> - Basic computer skills - Taking images from 2D to 3D - CAD modelling 	<ul style="list-style-type: none"> - Basic computer skills - Taking images from 2D to 3D - CAD modelling - Presentation and design - Communication of designs - Annotation - Key words
Assessment	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn 	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn 	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn - Annotation 	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn - Annotation 	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn 	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn 	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn 	<ul style="list-style-type: none"> - Assessed through the final design idea. - CAD - Hand drawn - Annotation
Literacy	<ul style="list-style-type: none"> - Key words used throughout. - Annotation to explain choices. 	<ul style="list-style-type: none"> - Key words used throughout. - Annotation to explain designs. 	<ul style="list-style-type: none"> - Explanation of design ideas - Lettering on the shop design 	<ul style="list-style-type: none"> - Annotation of design ideas - Lettering on the shop design 	<ul style="list-style-type: none"> - Following and reading instructions on the Trimble account setup. - Identifying key tool names. 	<ul style="list-style-type: none"> - Identifying key tool names. - Text added to shop front design. 	<ul style="list-style-type: none"> - Identifying key tool names. - Text added to shop front design. 	<ul style="list-style-type: none"> - Identifying key tool names. - Text added to shop front design. - Annotation on concept board.
Numeracy	N/A	N/A	Scale	Scale	CAD dimensions Scale	CAD dimensions Scale	CAD dimensions Scale	CAD dimensions Scale
Resources	Work booklet Pencil crayons	Work booklet Pencil crayons	Work booklet Pencil crayons	Work booklet Pencil crayons	Computers Design ideas	Computers Design ideas	Computers Design ideas	Computers Design ideas

Design & Technology Curriculum Aims



Year 9 - Textiles –Batik /Zip component Pencil Case: Aims and background of the Project:

- To enable pupils to understand what the subject of Textiles is.
- To give pupils experience in working in a practical environment with tools, materials and components they have not used before.
- To gain health and safety knowledge of working in a practical environment
- Allow pupils to build further their practical skills
- To allow pupils to express themselves creatively.
- To encourage independent and resilient learners

4 Week Rotation	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8
Learning Aims	<p>Understand the health and safety requirements when working in a workshop environment</p> <p>Understand the Design Brief and Key words associated</p> <p>Design Brief Task analysis Specification</p>	<p>Initial Sketches – timed immediate from design examples Design Ideas - tonal value, quality of drawing techniques</p> <p>HW Artist investigation</p>	<p>Design Ideas Design Ideas 2</p> <p>Tonal value outlining</p> <p>Quality of drawing techniques</p>	<p>Start to draw design on fabric</p> <p>Begin to batik/ Paint fabric dye in layers on to the fabric</p>	<p>Pin and tack zip to fabric</p> <p>Tack side seams</p>	<p>Sewing Machine Driving license/ Health and Safety of machine work</p>	<p>Machine zip to fabric</p> <p>Machine side seams</p> <p>QA and trim corners</p>	<p>Complete all practical and evaluation</p> <p>-Feed forward based on teacher assessment</p>
Learning outcomes	<p>-Simple statements or sentences used</p> <p>-Full detailed sentences used</p> <p>-Full detailed sentences used with full reasons given for all opinions</p> <p>Clarification of vocabulary</p>	<p>-Lots of help needed</p> <p>-Some help needed</p> <p>-Works independently</p> <p>-Work independently throughout</p> <p>-Work is not accurate</p> <p>-Work shows some accuracy</p> <p>-Work is mostly accurate</p> <p>-Work is very accurate</p> <p>-Select some of the correct tools</p> <p>-Use tools correctly and safely</p> <p>-Select all the correct tools & equipment</p> <p>-Select some of the correct Techniques & Processes</p> <p>-Select the correct Techniques & Processes</p> <p>-Simple statements or sentences used</p> <p>-Full detailed sentences used</p> <p>-Full detailed sentences used with full reasons given for all opinions</p>	<p>-Lots of help needed</p> <p>-Some help needed</p> <p>-Works independently</p> <p>-Work independently throughout</p> <p>-Work is not accurate</p> <p>-Work shows some accuracy</p> <p>-Work is mostly accurate</p> <p>-Work is very accurate</p> <p>-Select some of the correct tools</p> <p>-Use tools correctly and safely</p> <p>-Select all the correct tools & equipment</p> <p>-Select some of the correct Techniques & Processes</p> <p>-Simple statements or sentences used</p> <p>-Full detailed sentences used</p> <p>-Full detailed sentences used with full reasons given for all opinions</p>	<p>-Lots of help needed</p> <p>-Some help needed</p> <p>-Works independently</p> <p>-Work independently throughout</p> <p>-Work is not accurate</p> <p>-Work shows some accuracy</p> <p>-Work is mostly accurate</p> <p>-Work is very accurate</p> <p>-Select some of the correct tools</p> <p>-Use tools correctly and safely</p> <p>-Select all the correct tools & equipment</p> <p>-Select some of the correct Techniques & Processes</p> <p>-Select the correct Techniques & Processes</p>	<p>-Lots of help needed</p> <p>-Some help needed</p> <p>-Works independently</p> <p>-Work independently throughout</p> <p>-Work is not accurate</p> <p>-Work shows some accuracy</p> <p>-Work is mostly accurate</p> <p>-Work is very accurate</p> <p>-Select some of the correct tools</p> <p>-Use tools correctly and safely</p> <p>-Select all the correct tools & equipment</p> <p>-Select some of the correct Techniques & Processes</p> <p>-Select the correct Techniques & Processes</p>	<p>-Lots of help needed</p> <p>-Some help needed</p> <p>-Works independently</p> <p>-Work independently throughout</p> <p>-Work is not accurate</p> <p>-Work shows some accuracy</p> <p>-Work is mostly accurate</p> <p>-Work is very accurate</p> <p>-Select some of the correct tools</p> <p>-Use tools correctly and safely</p> <p>-Select all the correct tools & equipment</p> <p>-Select some of the correct Techniques & Processes</p> <p>-Select the correct Techniques & Processes</p>	<p>-Lots of help needed</p> <p>-Some help needed</p> <p>-Works independently</p> <p>-Work independently throughout</p> <p>-Work is not accurate</p> <p>-Work shows some accuracy</p> <p>-Work is mostly accurate</p> <p>-Work is very accurate</p> <p>-Select some of the correct tools</p> <p>-Use tools correctly and safely</p> <p>-Select all the correct tools & equipment</p> <p>-Select some of the correct Techniques & Processes</p> <p>-Select the correct Techniques & Processes</p>	<p>-Lots of help needed</p> <p>-Some help needed</p> <p>-Works independently</p> <p>-Work independently throughout</p> <p>-Work is not accurate</p> <p>-Work shows some accuracy</p> <p>-Work is mostly accurate</p> <p>-Work is very accurate</p> <p>-Select some of the correct tools</p> <p>-Use tools correctly and safely</p> <p>-Select all the correct tools & equipment</p> <p>-Select some of the correct Techniques & Processes</p> <p>-Select the correct Techniques & Processes</p> <p>-Simple statements or sentences used</p> <p>-Full detailed sentences used</p> <p>-Full detailed sentences used with full reasons given for all opinions</p>
Required Skills	<p>Understand the hazards in a workshop environment and how to avoid them.</p> <p>Keeping themselves and others in the room safe</p> <p>Definitions and explanations</p> <p>Expository writing</p>	<p>How quickly relate theme of the brief to actual designs</p> <p>Create quality drawings from initial sketches.</p> <p>Keeping themselves and others in the room safe</p>	<p>How to draw adding tonal value, textural detail and glow</p> <p>How to use colour pencils - blending</p> <p>Keeping themselves and others in the room safe</p> <p>Definitions and explanations</p> <p>Expository writing</p>	<p>How to plan patterns on to fabric</p> <p>Draw accurately</p> <p>How to mark and measure out accurately</p> <p>How to use batik and tjang correctly and safely</p> <p>How to use the iron safely</p> <p>Keeping themselves and others in the room safe</p>	<p>How to mark and measure out accurately</p> <p>Keeping themselves and others in the room safe</p> <p>How to use pins correctly</p> <p>How to attach a zip with pins and tacking</p> <p>Keeping themselves and others in the room safe</p> <p>Keeping themselves and others in the room safe</p>	<p>How to thread the machine including the bobbin</p> <p>How to guide the test paper through the machine</p> <p>Keeping themselves and others in the room safe</p> <p>Keeping themselves and others in the room safe</p>	<p>How to machine the zip to the fabric with seam allowance</p> <p>How to sew the side seams and trim to lessen bulk</p> <p>Keeping themselves and others in the room safe</p> <p>Keeping themselves and others in the room safe</p>	<p>How to quality control check stitching</p> <p>How to alter and amend stitching</p> <p>Keeping themselves and others in the room safe</p> <p>Keeping themselves and others in the room safe</p> <p>Definitions and explanations</p> <p>Expository writing</p>
Skills & content revisited	<p>Understand the health and safety requirements when working in a workshop environment</p>	<p>Working on the quality of finish on materials</p>	<p>How to add tone to a drawing</p> <p>How to add presentation techniques to drawings to make them stand out</p> <p>Working on the quality of finish on materials</p>	<p>How to conduct themselves in a workshop to ensure safety in a workshop</p> <p>How to mark our and measure correctly using cm & mm</p>	<p>Working on the quality of finish on materials</p>	N/A	N/A	N/A

Design & Technology Curriculum Aims

Assessment	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback	Open & Directed questions. Written questions Progress tests. Booklet assessment and feedback Photo of finished work
Literacy	Poly cotton Design	Quality Appearance Calico Cotton Poly cotton Zippers Toggle Buttons Tie throngs	Quality Appearance Calico Cotton Poly cotton Zippers Toggle Buttons Tie throngs	Quality Appearance Batik Tjang Wax pearls	Tacking Pinning Batik Tjang Dye Layering Iron Heat fixing Colour resist	Sewing Machine Tension Bobbin Fly wheel Stitch width/ length dials Thread guide Presser foot Presser foot lever	Quality Appearance Zip quality control Trim Bulk V cuts Side seams Seam allowance	Quality Appearance Zip quality control Trim Bulk V cuts Side seams Seam allowance Pinning Batik Tjang Dye Layering Iron Heat fixing Colour resist
Numeracy	N/A	N/A	N/A	Marking out and measuring in cm	N/A	N/A	N/A	N/A
Resources	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, pencils, timer	Booklet, colour pencils, fine liners,	Fabric, pencils, batik pots, tjant, fabric dye, iron, newspaper	Pins thread needles scissors	Sewing machine, driving test thread, scissors,	Sewing machine, thread, pins, scissors, zippers,	Sewing machine, thread, pins, scissors, zippers, Booklet, Green pens

Cultural Capital & Cross curricular links

No.	Cross Curricular Link	Examples
1	Literacy and Oracy	Reading for understanding, reading aloud, reading for pleasure, rich discussions. Writing in a range of styles and for different audiences.
2	Numeracy	Mathematical knowledge and skills. The ability to understand and work with numbers.
3	RSE **	Health and well-being, online safety, healthy relationships, sex education
4	SMSC /CITIZENSHIP*	British Values: democracy, individual liberty, mutual respect and tolerance, rule of law. Citizenship: as an individual, in the family, in the local community, on a national and international level. Political, cultural and environmental awareness and understanding. Opportunities outside of the classroom. Visits, visiting speakers, school trips, DofE, workshops.
5	Digital Competency	Word processing, programming, CAD/CAM , internet use, emails, digital presentations, spreadsheets, software and applications.
6	Careers	The world of work, career pathways, Unifrog. Linking curriculum learning to careers (GATSBY Benchmark 4)
7	Enterprise	Leadership, teamwork, resilience, presentation skills, time management, creative and innovative thinking, problem solving
8	Economic Understanding	Money and financial understanding