

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



Year 7 - Resistant Materials -Wooden Box: Aims and background of the Project:

- 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 wood (Pine & Plywood)
- Allow pupils to build further their written skills (Describing & explaining)
- To allow pupils to express themselves creatively.
- To encourage independent and resilient learners

8 Week Rotation	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Learning Aims	-Understand the health and safety requirements when working in a workshop environment -Create a detailed mind map in response to the Design Brief	-Begin two handle designs for your box (Plan view) -Explain each design in detail	-Complete your wood information page based on research into working with woods	-Mark out your lap joint using a Try-square, marking gauge and steel rule - Begin cutting out the Lap-joint using a Tenon saw & Bench hook	-Cut, chisel & clean up your lap joint using a chisel, wooden mallet, Tenon saw & bench hook -Glue your box together using blocks and string	-Start to design & cut out your handle from pine using a coping saw -Decorate your handle using the water colouring pens and permanent markers	-Sand all the sides of your box in the direction of the wood grain using 3 grades of sandpapers (rough -smooth) - Apply bee's wax for a nice polished professional finish	-Use the template to mark out and create the box inserts. -Glue the inserts in place once sanded -Attach handle into position using PVA
Learning outcomes	-Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions	-Add colour to design work -Use tone to make design work look 3D -Use graphic techniques to make design work stand out -Add texture to make design work look more realistic	-Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions	-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	-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	-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	-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	-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
Required Skills	-Understand the hazards in a workshop environment and how to avoid them. -Keeping themselves and others in the room safe	-How to add tone to a drawing -How to add presentation techniques to drawings to make them stand out -Descriptive writing	-Definitions and explanations -Expository writing	-How to mark out a lap joint -Draw accurately -How to mark and measure out accurately -How to cut a lap joint -How to use a Tenon saw -How to use a bench hook to help cut -Keeping themselves and others in the room safe	-How to use a Tenon saw -How to cut a lap joint -How to use a bench hook to help cut -How to use a chisel and wooden mallet -How to glue a wooden frame together -Keeping themselves and others in the room safe	-How to mark and measure out accurately -How to use a coping saw -How to operate the band facer correctly and safely -How to operate the scroll-saw correctly and safely -Keeping themselves and others in the room safe	-How to sand pine to a shop quality finish -How to correctly apply bees wax -Keeping themselves and others in the room safe	-Draw accurately -How to mark and measure out accurately -How to use a Tenon saw -How to use a bench hook to help cut -Keeping themselves and others in the room safe
Skills & content revisited	N/A	N/A	N/A	N/A	N/A	-How to add tone to a drawing -How to add presentation techniques to drawings to make them stand out	N/A	N/A
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	P.P.E, Pine, Plywood	Appearance, Market, Specification -Descriptive writing	Appearance, Growth Rings, Softwoods, Hardwoods, Evergreen -Definitions and explanations -Expository writing	Process ,Marking Gauge, Vice ,Equipment , Sawing, Tenon Saw, Bench hook, Bench hook, Removing waste, Knots, Plywood, Pine wood, P.P.E	Process ,Vice ,Equipment ,Sawing, Tenon Saw, Chisel, Wooden Mallet, Bench hook, Removing waste, Knots, Plywood, Pine wood, P.P.E, Poly-Vinyl Acetate	Process ,Vice , Coping Saw, Equipment, Knots, Plywood, Pine wood, Pillar-Drill, Band-facer, Scroll-Saw, P.P.E	Marking ,Process ,Vice ,Equipment, Knots, Plywood, Pine wood, P.P.E	Process ,Vice ,Equipment, P.P.E, Poly-Vinyl Acetate
Numeracy	N/A	Marking out space in student booklet to accurately fit in design ideas Students convert cm to mm	Student look at growth rings of a tree to work out its age	Marking out and measuring in mm using a steel rule	N/A	N/A	N/A	Mark out and measure the insert to the box using a steel rule
Resources	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, Isometric paper, Pencil Crayons, Green pens	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Pine wood, Try-square, Marking gauge, Steel rule, Tenon saw, Bench hook	Plywood, weights, Chisel, Wooden mallet, Tenon saw, Bench hook, Wooden blocks, String, PVA Glue	Coping saw, Scroll-Saw, Grades of sand paper, Water colour pens, permanent markers	Grades of sandpaper, Bees wax	Plywood, PVA, Panel pins, Pin hammer

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Year 7- Textiles – Diary/Planner cover: Aims and background of the Project:

- To give pupils experience in working in a practical environment with specialist equipment and materials.
- To gain health and safety knowledge of working in a practical environment.

- To develop a basic understanding of the various ways materials can be manipulated through experimentation.
- To develop a basic understanding of different materials and the properties that each hold.
- To understand how an art movement can be used as inspiration in a project.
- To allow pupils to express themselves creatively.
- To encourage independent and resilient learners.

8 Week Rotation	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Learning Aims	<ul style="list-style-type: none"> - To understand the health and safety requirements when working in a workshop environment. -To identify/highlight potential hazards found in a workshop environment. -Begin to work in the appropriate and safe manner expected. -Create a detailed mind map in response to the Design Brief 	<ul style="list-style-type: none"> - To grasp an understanding of basic decorative methods through experimentation. - To identify fabric properties in relation to the decorative technique. 	<ul style="list-style-type: none"> - To understand the fundamentals when planning out and drawing a successful design idea. - To apply effective rendering techniques. - To highlight appropriate fabrics and techniques for the end use. - Demonstrate use of subject specific terminology. 	<ul style="list-style-type: none"> - Apply practical skills for marking out accurately. - Identify and select appropriate fabrics and techniques and apply prior knowledge for making. - To apply appropriate decorative skills safely and effectively. 	<ul style="list-style-type: none"> - To continue to apply appropriate decorative skills safely and effectively. - Apply appropriate practical skills for making - To identify tolerances to construct planner cover. - To identify and apply finishing techniques to planner cover 	<ul style="list-style-type: none"> - To understand and demonstrate how to work with specialist equipment (sewing machine/Over locker) safely. - To identify tolerances and seam allowance and highlight it's importance when creating a product. 	<ul style="list-style-type: none"> - To continue to demonstrate working with specialist equipment (sewing machine/Over locker) safely. - To continue to identify tolerances and seam allowance and highlight it's importance when creating a product. - To continue to apply appropriate decorative skills safely and effectively. 	<ul style="list-style-type: none"> - To continue to demonstrate working with specialist equipment (sewing machine/Over locker) safely. - To continue to identify tolerances and seam allowance and highlight it's importance when creating a product. - To evaluate both design work and practical work, identifying strengths and areas to improve.
Learning outcomes	<ul style="list-style-type: none"> - Potential hazards and dangers within the Textiles room highlighted. Simple statements or sentences used when recording. - A range of potential hazards and dangers within the Textiles room highlighted. Reasons for this danger explained in full sentences. - A wide variety of hazards identified. Justification for safe conduct included. Full sentences used with detailed explanations. 	<ul style="list-style-type: none"> - Create samples showing some level of control. Students are sensible and execute the technique demonstrating some independence. - Students create each sample with some refinement. They are able to evaluate each sample created. They can identify strengths and areas to improve on each sample. - Students are able to achieve a high quality finish on each sample. They show independence and creativity. Evaluations are thorough and ways to improve each technique is discussed. 	<ul style="list-style-type: none"> - Design ideas show some link to Pop Art and is loosely linked to students research. Some colour applied with attempts made to render work. - Design ideas link strongly to Pop Art. Research used effectively to inform ideas. Colour has been added effectively and rendering used varies tone in work. Designs labelled with techniques and fabrics. - A range of design ideas evident linking strongly to Pop Art. Research is maturely and effectively used to inform ideas. Colour has been added effectively and rendering used varies tone in work. Designs are annotated with justification for fabric and technique choice. 	<ul style="list-style-type: none"> -Lots of support required when marking out, cutting and applying decoration. -Some selection of appropriate tools and materials. -Work lacks accuracy when compared against tolerances. -Some support required when marking out, cutting and applying decoration. Selection of appropriate tools and materials evident. -Work shows some accuracy when compared to tolerances. -Works independently when marking out, cutting and applying decoration. -Accurate selection of tools and materials. -A wide range of appropriate techniques and processes selected and used. 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work lacks accuracy -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct materials and equipment safely -Use tools correctly and safely -Select some of the correct Techniques & Processes -Select all the correct tools & equipment -Select the correct Techniques & Processes 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work lacks accuracy -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct materials and equipment safely -Use tools correctly and safely -Select some of the correct Techniques & Processes -Select all the correct tools & equipment -Select the correct Techniques & Processes 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work lacks accuracy -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct materials and equipment safely -Use tools correctly and safely -Select some of the correct Techniques & Processes -Select all the correct tools & equipment -Select the correct Techniques & Processes 	<ul style="list-style-type: none"> -Lots of help needed -Some help needed -Works independently -Work independently throughout -Work lacks accuracy -Work shows some accuracy -Work is mostly accurate -Work is very accurate -Select some of the correct materials and equipment safely -Use tools correctly and safely -Select some of the correct Techniques & Processes -Select all the correct tools & equipment -Select the correct Techniques & Processes
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. - Highlight and identify risks. - Analyse design brief. 	<ul style="list-style-type: none"> -Definitions and explanations of techniques and methods. -Methods recorded -Tie-dyeing and fabric pen samples produced 	<ul style="list-style-type: none"> -How to add tone to a drawing -How to render a drawing -How to add presentation techniques to drawings to make them stand out -How to annotate using subject specific terminology. How to use research on an art movement to influence design work. 	<ul style="list-style-type: none"> -How to mark out using tailors chalk and a template accurately. -How to mark and measure out accurately. -How to cut out successfully using fabric shears. How to finish a fabric edge using either the pinking shears or the Overlocker. -How to identify and mark on seam allowance -How to read a pattern correctly using pattern markings -Keeping themselves and others in the room safe 	<ul style="list-style-type: none"> -How to use an iron to press fabric -How to cut out materials and create own pattern pieces. -How to handle felt and identify its properties -How to create a running stitch -How to secure stitching in fabric -How to use additional materials, techniques and components to enhance planner cover. 	<ul style="list-style-type: none"> -How to thread up the sewing machine correctly and safely. -How to select a running stitch and control the hand wheel, presser foot and foot pedal. -How to select a running stitch and a zigzag stitch. -Keeping themselves and others in the room safe -Complete the health and safety driving test. 	<ul style="list-style-type: none"> -How to construct the planner cover by turning in corners and stitching securely. -How to iron and press fabrics safely. -How to finish raw edges accurately -Keeping themselves and others in the room safe - Analyse project reflecting on design brief. Use evaluative skills to identify strengths and areas to improve. 	<ul style="list-style-type: none"> -How to construct the planner cover by turning in corners and stitching securely. -How to iron and press fabrics safely. -How to finish raw edges accurately -Keeping themselves and others in the room safe - Analyse project reflecting on design brief. Use evaluative skills to identify strengths and areas to improve.
Skills & content revisited	Build on any prior knowledge students may have gained at KS2.	Build on any prior knowledge students may have gained at KS2.	<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 label or annotate using subject specific terminology. 	Build on any prior knowledge students may have gained at KS2.	Build on any prior knowledge students may have gained at KS2.	Build on any prior knowledge students may have gained at KS2.	Build on any prior knowledge students may have gained at KS2.	Build on any prior knowledge students may have gained at KS2.

Design & Technology Curriculum Aims

Assessment	Open & Directed questions. Discussion based questions dissecting the design brief. Verbal feedback and booklet assessment where necessary throughout project.	Open & Directed questions. Peer assessment when evaluating design work. Verbal feedback and booklet assessment where necessary throughout project	Open & Directed questions. Group discussions Self-assessment when evaluating textile techniques Verbal feedback and booklet assessment where necessary throughout project	Self and peer assessment measuring work against tolerances. Verbal feedback and booklet assessment where necessary throughout project	Verbal feedback offered Verbal feedback and booklet assessment where necessary throughout project	Teacher assessment of driving test Verbal feedback and booklet assessment where necessary throughout project	Self and peer assessment – measure tolerances against template Verbal feedback and booklet assessment where necessary throughout project	Self evaluation Teacher evaluation and final assessment Photo of finished work Verbal feedback and booklet assessment where necessary throughout project
Literacy	<u>Subject specific terminology:</u> Design brief, planner cover, sewing machine, decorative, embellishment, applique, fabric, stitch, and embroidery. Students will need to analyse the task set. Students will use simple statements or sentences to highlight hazards/dangers in the Textiles room.	<u>Subject specific terminology:</u> Tie dye, fabric pen, enhance, decorate, materials, absorbent, resist method, trace, manipulate, and heat set.	<u>Subject specific terminology:</u> Pop Art, render, annotation, textile techniques, outline, sketch and label. Students annotate design ideas. Some students will justify/explain their reasons for fabric choices and decorative techniques.	<u>Subject specific terminology:</u> Planner cover, pattern piece, pattern markings, tailors chalk, tie dye, resist method, applique, fabric shears, embroider, Verbally communicate and problem solve whilst applying decorative and constructive techniques.	<u>Subject specific terminology:</u> Running stitch, embroider, decoration, enhance, component, button, bead, sequin, needle, pins Verbally communicate and problem solve whilst applying decorative and constructive techniques.	<u>Subject specific terminology:</u> Thread, thread guides, take up lever, hand wheel, presser foot, foot pedal, bobbin, bobbin case, needle, zig-zag stitch, reverse stitch, running stitch. Verbally communicate and problem solve whilst applying decorative and constructive techniques.	<u>Subject specific terminology:</u> Seam allowance, Overlock, pinking shears, tolerance, thread, thread guides, take up lever, hand wheel, presser foot, foot pedal, bobbin, bobbin case, needle, zig-zag stitch, reverse stitch, running stitch.	<u>Subject specific terminology:</u> Thread, thread guides, take up lever, hand wheel, presser foot, foot pedal, bobbin, bobbin case, needle, zig-zag stitch, reverse stitch, running stitch. Evaluation, analysis Students evaluate project – final piece and design ideas. Students should use literacy mats to support.
Numeracy	N/A	Students mark and cut out fabrics.	Marking out space in student booklet to accurately fit in design ideas	Identify tolerances and seam allowance.	Sew applique accurately, students will need to ensure that stitching is accurately spaced and evenly placed.	Students will have to stay within tolerances when completing the driving test. Students will need to identify seam allowance (1.5cm s/a) and guidelines on the sewing machines.	Measure inner sections of the planner cover with a ruler, mark and turn edges in. Students will need to stick to a 1.5cm seam allowance.	Measure inner sections of the planner cover with a ruler, mark and turn edges in. Students will need to stick to a 1.5cm seam allowance.
Resources	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, dye baths, elastic bands, calico squares, fabric pens, pipettes, paintbrushes, iron and ironing board	Booklet, Pencil Crayons, pens, drawing pencils, rubbers, sharpeners, rulers	Calico, templates, pattern pieces, tailors chalk, fabric shears, pinking shears, dye baths, elastic bands, brushes, pipettes, pins, needles, felt, pattern paper	Iron and ironing board, cotton, felt, fleece, needles, threads, pins, pattern paper, fabric pens, pockets, buttons, sequins, beads, threads, embroidery scissors, embroidery threads.	Driving test sheets, bobbins, bobbin cases, threads, fabric shears, Overlocker, sewing machines.	Bobbins, bobbin cases, threads, fabric shears, Overlocker, sewing machines, planner cover materials, pins.	Literacy mats, Booklets, Bobbins, bobbin cases, threads, fabric shears, Overlocker, sewing machines, planner cover materials, pins.

Design & Technology Curriculum Aims



Year 7 - Graphics - Introduction to Graphics / Restaurant Menu: Aims and background of the

Project:

- To introduce pupils to the subject of Graphics and what the subject is all about.
 - To give pupils experience in working in a practical environment with specialist equipment and materials.
 - To gain health and safety knowledge of working in a practical environment.
 - To develop a basic understanding of the various ways materials can be manipulated through experimentation.
 - To develop the fundamental graphic skills required to be a graphics designer
- To allow pupils to express themselves creatively.
 - To encourage independent and resilient learners.
 - learners and problem solvers

8 Week Rotation	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Learning Aims	What are the key H&S & Classroom expectations? What is Graphic Design? What are the three main areas of graphics? What is Oblique Drawing? How do you draw in oblique?	Introduction to colour What is the colour wheel? What are Primary &* Secondary colours What are colour opposites? What is Colour association? Introduction to Ideograms & Pictograms	Finish your work on the two types of ideograms/pictograms Introduction to project & Design Brief Students must complete a mood board based on word association with their chosen restaurant name	Complete a mind map word association based on your chosen restaurant name Using the acquired graphical skills begin designing your Initial idea for the new name of the restaurant	Design the food items using word associations For each food item design a pictogram to represent it	Use Microsoft Word to design the finished menu	Use Microsoft Word to design the finished menu	Finish making menu and present your finished idea to the group
Learning outcomes	-Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions -I can add colour to my design work -I can design more than one idea -I can use black pen to go around my idea -I can add black pen and a glow effect to go around my idea	-Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions -I can add colour to my design work -I can design more than one idea -I can use black pen to go around my idea -I can add black pen and a glow effect to go around my idea	-I can add colour to my design work -I can design more than one idea -I can use black pen to go around my idea -I can add black pen and a glow effect to go around my idea -I can collect images as part of my research -I can list Key words -I can take inspiration from other sources -I can use designs from other designers to help inspire my work	-I can collect images as part of my research -I can list Key words -I can list key words and branch off with associations -I can take inspiration from other sources -I can use designs from other designers to help inspire my work -I can add colour to my design work -I can design more than one idea -I can use black pen to go around my idea -I can add black pen and a glow effect to go around my idea -I can explain my idea to my teacher -I can explain and show my ideas to my peers -I can explain and show my ideas to my peers & teacher through a presentation -I can explain and show my ideas to my peers & teacher through a presentation and answer questions asked	-I can add colour to my design work -I can design more than one idea -I can use black pen to go around my idea -I can add black pen and a glow effect to go around my idea -I can explain my idea to my teacher -I can explain and show my ideas to my peers -I can explain and show my ideas to my peers & teacher through a presentation -I can explain and show my ideas to my peers & teacher through a presentation and answer questions asked	-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 -Incorporate the use of CAD -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	-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 -Incorporate the use of CAD -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	-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 -Incorporate the use of CAD -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
Required Skills	-Understand the hazards in a workshop environment and how to avoid them. -Keeping themselves and others in the room safe -what is graphics -Identify key terms in products -Using a pencil & ruler -Add colour to design work -Use tone to make design work look 3D -Use graphic techniques to make design work stand out	-Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions -Using a pencil & ruler -Add colour to design work -Use tone to make design work look 3D -Use graphic techniques to make design work stand out	-Using a pencil & ruler -Add colour to design work -Use tone to make design work look 3D -Use graphic techniques to make design work stand out -Search engine skills -Image manipulation via word	-Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions -Using a pencil & ruler -Add colour to design work -Add colour to design work -Use graphic techniques to make design work stand out -Apply knowledge of colour -Apply knowledge of Ideograms and pictograms	-Using a pencil & ruler -Add colour to design work -Use graphic techniques to make design work stand out -Apply knowledge of colour -Apply knowledge of Ideograms and pictograms	-Apply knowledge of colour -Apply knowledge of Ideograms and pictograms -Word processing skills using Microsoft word -Image manipulation skills using Microsoft word -Image creation skills using Microsoft word	-Apply knowledge of colour -Apply knowledge of Ideograms and pictograms -Word processing skills using Microsoft word -Image manipulation skills using Microsoft word -Image creation skills using Microsoft word	-Apply knowledge of colour -Apply knowledge of Ideograms and pictograms -Word processing skills using Microsoft word -Image manipulation skills using Microsoft word -Image creation skills using Microsoft word
Skills & content revisited	N/A	N/A	Colour Theory, Use tone to make design work look 3D, Use graphic techniques to make design work stand out	Colour Theory, Ideograms & pictograms, Use tone to make design work look 3D, Use graphic techniques to make design work stand out	Colour Theory, Ideograms & pictograms, Use tone to make design work look 3D, Use graphic techniques to make design work stand out	Colour Theory, Ideograms & pictograms	Colour Theory, Ideograms & pictograms	Colour Theory, Ideograms & pictograms
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

Design & Technology Curriculum Aims

Literacy	Typography, colour, Oblique, Pictogram	Primary colour, secondary colour, colour opposites, colour wheel, colour association, Ideogram, Pictogram, Typography	Design, planning, user, target market, Design brief, Ideogram, Pictogram, Typography	Design brief, association, design	Pictogram, Ideogram, colour association, design brief, target market, colour opposites, primary colours, secondary colours, typography	Pictogram, Ideogram, colour association, design brief, target market, colour opposites, primary colours, secondary colours, typography, CAD	Pictogram, Ideogram, colour association, design brief, target market, colour opposites, primary colours, secondary colours, typography, CAD	Pictogram, Ideogram, colour association, design brief, target market, colour opposites, primary colours, secondary colours, typography, CAD
Numeracy	Measuring with a ruler when oblique drawing	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Resources	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, ICT Facilities	Booklet, ICT Facilities	Booklet, ICT Facilities

Design & Technology Curriculum Aims



8 Week Rotation	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Learning Aims	Refresher on health and safety and room expectations Introduction to the project design brief	Begin writing your Specification Start your design idea for the back of the coat hook	Carry out a product analysis task to learn from an existing product Complete your design ideas	Using files round both ends of your coat hook Begin the polishing process of the hook Drill & countersink the coat hook	Using engineers blue and a scribe, mark out the shape of the back plate Using a hack-saw/ Junior hack-saw and begin cutting out the shape	Finish cutting out the shape of your back plate File flat and smooth all the sides of your shape	Using a countersunk rivet attached the coat hook to the back plate	Evaluate your finished product
Learning outcomes	-Simple statements or sentences used -Full detailed sentences used -Full detailed sentences used with full reasons given for all opinions	-One word simple statements -I can write a simple bulleted specification -Select from a range of materials -I can write a specification and justify each point -I can take into account the properties of the selected materials -I can take into account budgetary constraints -I can write a design specification which reflects some aspects of my research I can develop and alter my specification due to on-going research -I can add colour to my design work -I can design more than one idea -I can use black pen to go around my idea -I can add black pen and a glow effect to go around my idea	-I can collect images as part of my research -I can list Key words -I can list key words and branch off with associations -I can take inspiration from other sources -I can use designs from other designers to help inspire my work -I can analyse the work of past and present -I can analyse user groups & cultures to understand their needs & wants -My research shows a link to my brief -I consider primary, secondary & tertiary users in my research -I have investigated new & emerging technologies -I can add colour to my design work -I can design more than one idea -I can use black pen to go around my idea -I can add black pen and a glow effect to go around my idea	-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	-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	-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	-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	-I can identify good & bad points about my design -I can get my users feedback on my finished product -I can explain how I overcame technical problems while making my product -I can consider the primary users when evaluating to ensure that they are fully catered for -I can evaluate & test my finished product against my specification -I can evaluate & test my finished product against my specification & suggest improvements -I can evaluate & test my finished product against my specification & develop it further based on the suggested improvements -I can take into account environmental factors (6'r, product lifecycle, carbon footprint) when suggesting improvements -I can take into account social, moral and cultural issues when suggesting improvements
Required Skills	-Understand the hazards in a workshop environment and how to avoid them. -Keeping themselves and others in the room safe -Using a pencil & ruler	-Definitions and explanations -How to add tone to a drawing -How to add presentation techniques to drawings to make them stand out -Descriptive writing	-Definitions and explanations -Expository writing -How to add tone to a drawing -How to add presentation techniques to drawings to make them stand out -Descriptive writing	-How to mark out the shape of the hook -Draw accurately -How to mark and measure out accurately -How to use a hand file -How to shape using a file -How to use the pillar drill -How to use abrasive materials to polish metal -How to use a metal vice and soft jaws -How to operate the pillar drill correctly and safely -Keeping themselves and others in the room safe	-How to use engineers blue -How to mark metal using a scribe -How to use hack-saw /junior hack-saw -How to use a metal vice and soft jaws	-How to mark and measure out accurately -How to use a hand file -How to shape using a file -How to use abrasive materials to polish metal -How to use a metal vice and soft jaws -How to polish to a shop quality finish	-How to operate the pillar drill correctly and safely -Keeping themselves and others in the room safe -How to solid countersink rivets -How to use abrasive materials to polish metal -How to polish to a shop quality finish	-Draw accurately -How to mark and measure out accurately -How to use a Junior Hack saw -How to use a bench hook to help cut -Keeping themselves and others in the room safe
Skills & content revisited	Health and safety	Writing a specification – further analysis added	Design ideas and presentation skills	Health and safety Practical skills	Health and safety Practical skills	Health and safety Practical skills	Health and safety Practical skills	N/A
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	Aluminium, ore, ferrous, non-ferrous metal, appearance	Aluminium, rivet, Specification, target market	Target market, evaluation, environment, process, rust,	Hack-saw, Junior hack-saw, centre punch, countersink, rivet, Aluminium, Pillar-drill, vice,	Hack-saw, Junior hack-saw, centre punch, countersink, rivet, Aluminium, Pillar-drill, vice, Engineers square	Hack-saw, Junior hack-saw, centre punch, countersink, rivet, Aluminium, Pillar-drill, vice, Engineers square, hand file, half round file	Hack-saw, Junior hack-saw, centre punch, countersink, rivet, Aluminium, Pillar-drill, vice, Engineers square, hand file	Evaluation, Hack-saw, Junior hack-saw, centre punch, countersink, rivet, Aluminium, Pillar-drill, vice, Engineers square, hand file, half round file, manufacture
Numeracy	N/A	Turning the sizes of the item from mm to CM	N/A	Marking and measuring	Marking and measuring	Marking and measuring	N/A	N/A

Design & Technology Curriculum Aims



Resources	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, pens, pencils, literacy mats, teacher PP to support learning.	Booklet, pens, pencils, literacy mats, teacher PP to support learning, glue sticks, scissors.	Hand files, Pillar-drill, emery cloth, wet & dry paper, wire wool, 3.5mm drill bit, ball peen hammer, metal vice, Aluminium bar, soft jaws	Engineers blue, scribe, Hack saw, junior – hack saw, soft jaws	Hack saw, Junior-hack saw, hand files, half round file, emery cloth, wet & dry paper, wire wool, soft jaws	Pillar-drill, 3.5mm drill bit, rivets, ball peen hammer, hand files, soft jaws	Booklet, pens, pencils, literacy mats, teacher PP to support learning.
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Year 8 - Resistant Materials – Aluminium Coat Hook: Aims and background of the Project:

- To build upon pupils prior knowledge of resistant materials.
- To give pupils experience in working in a practical environment with specialist equipment and materials.
- To gain health and safety knowledge of working in a practical environment.
- Gaining a basic understanding of the properties of metal.
- Allow pupils to build further their written skills (Describing & explaining)
- To allow pupils to express themselves creatively.
- To encourage independent and resilient learners

Design & Technology Curriculum Aims



Year 8 – Textiles- Beanie Hat : Aims and background of the Project:

- To give pupils experience in working in a practical environment with specialist equipment and materials.
- To gain health and safety knowledge of working in a practical environment.

- To continue to develop a basic understanding of the various ways materials can be manipulated through experimentation.
- To continue to develop a basic understanding of different materials and the properties that each hold.
- To understand how an art movement can be used as inspiration in a project.
- To understand how to build shapes in 3D looking at sculpture and layering.
- To understand how to plan, model and sample before finalising a design/final piece.
- To identify a target market and tailor a product appropriately
- To allow pupils to express themselves creatively.
- To encourage independent and resilient learners.

8 Week Rotation	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Learning Aims	<p>DESIGN BRIEF -Begin to understand/work in the appropriate and safe manner expected.</p> <p>To be able to discuss, analyse and question the design brief set.</p> <p>To explore possibilities linked to the design brief.</p> <p>To begin to understand the consumer and their needs when thinking about designing a product.</p>	<p>PRODUCT ANALYSIS - To analyse an existing product</p> <p>- To identify strengths and weaknesses in existing designs.</p> <p>- To develop/create a client profile using research to support.</p> <p>- To create a mood board (research board) linking closely to topic.</p>	<p>FABRIC INVESTIGATION - To identify suitable materials and techniques to be used in the project.</p> <p>- To identify the properties of Polartec Fleece.</p> <p>- To understand how to embed research into design ideas.</p>	<p>INITIAL DESIGN IDEAS</p> <p>- To understand how to generate a variety of initial design ideas.</p> <p>- To apply effective rendering techniques.</p> <p>- To demonstrate use of subject specific terminology.</p> <p>- To understand how to create an effective design sheet.</p>	<p>DEVELOPED DESIGN IDEAS</p> <p>- To continue to develop/create a wide range of design ideas.</p> <p>- To apply effective rendering techniques</p> <p>- To apply research to design work (mood board/product analysis).</p> <p>- To demonstrate use of subject specific terminology.</p>	<p>FABRIC SAMPLING</p> <p>- To grasp (and build on) an understanding of decorative and construction methods through experimentation.</p> <p>- To identify fabric properties in relation to the decorative technique.</p> <p>- To apply decorative and construction methods to the fabric and analyse the end result.</p>	<p>FABRIC SAMPLING</p> <p>- Identify and select appropriate fabrics and techniques and apply prior knowledge for making.</p> <p>- To apply appropriate decorative skills to fabric safely and effectively.</p>	<p>CUTTING OUT FABRICS</p> <p>- Demonstrate accuracy when constructing 3D products (cutting and marking out).</p> <p>- To identify and understand the industrial processes used in manufacture (pattern markings, lay plans, spec drawings).</p>
<p>Learning outcomes</p> <p>PASS</p> <p>MERIT</p> <p>DISTINCTION</p>	<p>- To work safely when in workshop environment. Basic understanding of brief set and ideas discussed.</p> <p>- Clear understanding of task set. Ideas discussed and recorded, questions posed, further research highlighted.</p> <p>- Industry how it would be done, thorough task analysis conducted, target market identified and users needs highlighted. Wide variety of ideas recorded</p>	<p>- Analyse existing product highlighting fabric types and decorative techniques used. Research conducted – imagery collected to use in designs</p> <p>- How it would look 2D pattern, record texture through drawing, use subject specific terminology to highlight decorative and construction methods. Wide range of imagery collected strongly linking to chosen theme.</p> <p>- Industrial practices discussed as well as production methods. Drawn from different viewpoints, illustration as well as spec drawing, aftercare of product considered and discussed. Informative and varied mood board – wide variety of imagery and drawings sketched from this.</p>	<p>- Describe fabrics appearance, highlight some properties</p> <p>- Analyse fabric type, highlight properties and end uses of the fabric. Highlight environmental issues</p> <p>- Analyse fabric types, highlight properties and consider suitability for own product. Investigate environmental impact, aftercare of material and consider cost for target market.</p>	<p>- Design ideas show some link to theme and are loosely linked to student’s research. Some colour applied with attempts made to render work. Limited annotation.</p> <p>- Research used effectively to inform ideas. Colour has been added effectively and rendering used varies tone in work. Designs annotated with techniques and fabrics.</p> <p>- A range of design ideas presented linking strongly to chosen theme. Research is maturely and effectively used to inform ideas. Colour has been added effectively and rendering used varies tone in work. Designs are annotated with justification for fabric and technique choice.</p>	<p>- Design ideas show some link to theme and are loosely linked to student’s research. Some colour applied with attempts made to render work. Limited annotation.</p> <p>- Research used effectively to inform ideas. Colour has been added effectively and rendering used varies tone in work. Designs annotated with techniques and fabrics.</p> <p>- A range of design ideas presented linking strongly to chosen theme. Research is maturely and effectively used to inform ideas. Colour has been added effectively and rendering used varies tone in work. Designs are annotated with justification for fabric and technique choice.</p>	<p>- Create samples showing some level of control. Students are safe and execute 2 techniques demonstrating some independence.</p> <p>- Students create each sample with some refinement. They are able to evaluate each sample created. They can identify strengths and areas to improve on each sample. 2+ created.</p> <p>- Students are able to achieve a high quality finish on each sample. They show independence and creativity.</p> <p>Evaluations are thorough and ways to improve each technique is discussed. 3+ created.</p>	<p>- Create samples showing some level of control. Students are safe and execute 2 techniques demonstrating some independence.</p> <p>- Students create each sample with some refinement. They are able to evaluate each sample created. They can identify strengths and areas to improve on each sample. 2+ created.</p> <p>- Students are able to achieve a high quality finish on each sample. They show independence and creativity.</p> <p>Evaluations are thorough and ways to improve each technique is discussed. 3+ created.</p>	<p>- Create samples showing some level of control. Students are safe and execute 2 techniques demonstrating some independence.</p> <p>- Students create each sample with some refinement. They are able to evaluate each sample created. They can identify strengths and areas to improve on each sample. 2+ created.</p> <p>- Students are able to achieve a high quality finish on each sample. They show independence and creativity.</p> <p>Evaluations are thorough and ways to improve each technique is discussed. 3+ created.</p>

Design & Technology Curriculum Aims

<p>Required Skills</p>	<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. - Highlight and identify risks. - Analyse design brief. - Discuss and mind map ideas in order to understand the target market and their needs. 	<ul style="list-style-type: none"> - How to analyse an existing product - How to highlight key features using correct terminology - To research independently in response to the design brief 	<ul style="list-style-type: none"> - To analyse and study a range of fabrics considering the properties of each. - To select the most appropriate for the project. - Research skills needed to fully understand technical fabrics. - How to investigate and research fabrics 	<ul style="list-style-type: none"> - How to develop a range of initial sketches using a timed approach. - How to add presentation techniques to drawings to make them stand out - How to annotate using subject specific terminology. - How to use research effectively in design work. 	<ul style="list-style-type: none"> - How to add tone to a drawing - How to render a drawing - How to present designs in the most effective way. - How to adopt professional rendering techniques. - How to label and annotate designs - How to integrate and embed research in designs. - How to draw from different viewpoints - How to draw showing key details and construction methods. 	<ul style="list-style-type: none"> - How to add decorative techniques to Fleece – e.g. fabric pens, paint, applique, reverse applique, embellishing, embroidery, 3D structures using wadding/stuffing. - How to construct – from 2D to 3D - How to use a variety of fabrics and or techniques within one sample. 	<ul style="list-style-type: none"> - How to add decorative techniques to Fleece – e.g. fabric pens, paint, applique, reverse applique, embellishing, embroidery, 3D structures using wadding/stuffing. - How to construct – from 2D to 3D - How to use a variety of fabrics and or techniques within one sample. 	<ul style="list-style-type: none"> - How to mark out using tailors chalk and templates accurately. - How to mark and measure out accurately. - How to cut out successfully using fabric shears. - How to identify and mark on seam allowances - How to adapt a pattern to meet the design. - How to read a pattern correctly using pattern markings - Keeping themselves and others in the room safe - How to create own individual pattern pieces.
<p>Skills & content revisited</p>	<p>Build on any prior knowledge students have gained at KS2 and experience in Year 7</p>	<p>Build on any prior knowledge students may have gained at KS2 and experience in Year 7</p>	<p>Build on any prior knowledge students may have gained at KS2/year 7.</p>	<ul style="list-style-type: none"> - How to improve on design work from Year 7. Identify areas of improvement from previous project. - How to add tone/rendering to a drawing - How to adopt quality presentation techniques to drawings to make them stand out. - How to label or annotate using subject specific terminology. 	<ul style="list-style-type: none"> - How to improve on design work from Year 7. Identify areas of improvement from previous project. - How to add tone/rendering to a drawing - How to adopt quality presentation techniques to drawings to make them stand out. - How to label or annotate using subject specific terminology. 	<p>Build on prior knowledge of materials and techniques in planner cover project.</p>	<p>Build on prior knowledge of materials and techniques in planner cover project.</p>	<p>Build on prior knowledge of construction from planner cover project</p>
<p>Assessment</p>	<p>Open & Directed questions. Discussion based questions dissecting the design brief. Verbal feedback and booklet assessment where necessary throughout project.</p>	<p>Open & Directed questions. Group work when initially analysing product. Peer assessment when product analysis is complete. Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Open & Directed questions. Group discussions Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Self and peer assessment throughout design process. Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Self and peer assessment throughout design process. Final teacher assessment for this section. Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Self-reflection and assessment when sampling Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Final teacher assessment when sampling is complete. Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Students continually evaluate/assess accuracy of work. Check tolerances regularly. Verbal feedback and booklet assessment where necessary throughout project</p>
<p>Literacy</p>	<p>Subject specific terminology: Design brief, fleece, hat, sewing machine, decorative, embellishment, applique, fabric, stitch, embroidery, Polartec fleece, construction, soft sculpture, 3D elements, theme</p> <p>Students will need to analyse the task set. Students will use simple statements or sentences. Students will pose questions considering further investigation into task.</p>	<p>Subject specific terminology: Mood board, research, client, user needs, product, analysis, existing product.</p> <p>Students will dissect an existing product and answer a series of questions considering the user and their needs. They will need to justify their answers.</p>	<p>Subject specific terminology: Fabric, material, properties, strengths, weaknesses, drape, elasticity durability, stretch, handle, lustre, end use.</p> <p>Students will analyse a series of fabrics and record their findings in a table. They will need to list and compile their findings.</p>	<p>Subject specific terminology: Initial design ideas, render, tone, line, form, embed, merge, research, present, shade, template.</p> <p>Students annotate design ideas. Some students will be able to justify/explain their reasons for fabric choices and decorative/construction techniques.</p>	<p>Subject specific terminology: Initial design ideas, render, tone, line, form, embed, merge, research, present, shade, template.</p> <p>Students annotate design ideas. Some students will be able to justify/explain their reasons for fabric choices and decorative/construction techniques.</p>	<p>Subject specific terminology: Fleece, thread, embroidery, embellish, applique, reverse applique, decorate, construct, layer, tolerance, seam allowance, cotton, felt, polyester, wool, seam.</p> <p>Verbally communicate and problem solve whilst applying decorative and constructive techniques.</p>	<p>Subject specific terminology: Fleece, thread, embroidery, embellish, applique, reverse applique, decorate, construct, layer, tolerance, seam allowance, cotton, felt, polyester, wool, seam, fabric paint, fabric pen, components, beads, sequins, buttons.</p> <p>Verbally communicate and problem solve whilst applying decorative and constructive techniques.</p>	<p>Subject specific terminology: Shears, pattern pieces, templates, seam allowance, pattern markings, tailors chalk, pattern paper, fabric shears, lay plan.</p> <p>Record key terminology and provide definition in booklet.</p> <p>Verbally communicate and problem solve whilst adapting pattern pieces and developing individual pattern pieces.</p>
<p>Numeracy</p>	<p>N/A</p>	<p>Students mark and cut out fabrics</p>	<p>Marking out space in student booklet to accurately fit in design ideas</p>	<p>Identify tolerances and seam allowance.</p>	<p>Sew applique accurately, students will need to ensure that stitching is accurately spaced and evenly placed.</p>	<p>Students will have to stay within tolerances when completing the driving test. Students will need to identify seam allowance (1.5cm s/a) and guidelines on the sewing machines</p>	<p>Measure inner sections of the planner cover with a ruler, mark and turn edges in. Students will need to stick to a 1.5cm seam allowance.</p>	<p>Measure inner sections of the planner cover with a ruler, mark and turn edges in. Students will need to stick to a 1.5cm seam allowance.</p>
<p>Resources</p>	<p>Booklet, pens, pencils, literacy mats, teacher PP to support learning.</p>	<p>Existing hats (one between 4), pencils, pens, booklets, PP to support learning, literacy mats</p>	<p>Booklet, pens, pencils, a variety of different fabric swatches.</p>	<p>Templates, pencils, rubbers, sharpeners, coloured pencils, rulers, mood boards (H/W).</p>	<p>Templates, pencils, rubbers, sharpeners, tracing paper, coloured pencils, rulers, mood boards (H/W).</p>	<p>Fleece, felt, beads, buttons, sequins, embroidery thread, machine thread, needles, fabric pens, pastels and paint, cotton, wool, cardboard, pins, fabric shears, embroidery scissors.</p>	<p>Fleece, felt, beads, buttons, sequins, embroidery thread, machine thread, needles, fabric pens, pastels and paint, cotton, wool, cardboard, pins, fabric shears, embroidery scissors.</p>	<p>Fabric shears, Polartec fleece, tailors chalk, pattern pieces, templates, pins, embroidery scissors, pattern paper, cardboard, plastic wallets.</p>

Year 8 – Graphics- 3D Letters : Aims and background of the Project:

- To give pupils experience in working in a practical environment with specialist equipment and materials.
- To gain health and safety knowledge of working in a practical environment.
- To continue to develop understanding of using 2D design.
- To continue to develop analysing a task and producing a specification
- To understand how produce a perspective drawing.
- To understand how create a range of repeat patterns.
- To understand how nets work and what the symbols on a net me
- To identify a target market and tailor a product appropriately
- To allow pupils to express themselves creatively.
- To encourage independent and resilient learners.
- learners and problem solvers

14 Week Rotation	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Learning Aims	DESIGN BRIEF, TYPOGRAPHY KNOWLEDGE AND SPECIFICATION. To gain knowledge of the new project. To gain knowledge of typography To create a specification	SPECIFICATION, REPEAT PATTERNS BLOCK AND BRICK To continue to complete specification. To gain knowledge of repeat patterns and create a block pattern. To develop knowledge of creating a block pattern To gain knowledge of creating a brick pattern	REPEAT PATTERN BRICK AND HALF DROP To develop knowledge of creating a brick pattern To gain knowledge of creating a half drop pattern To develop knowledge of creating a half drop pattern.	REPEAT PATTERN DIAMOND AND TRANSFERRING PATTERNS To gain knowledge of creating a diamond pattern To gain knowledge of transferring patterns onto nets	HEALTH AND SAFETY, NETS KNOWLEDGE, USE OF TOOLS AND EQUIPMENT To develop knowledge of nets To gain knowledge of how to use scissors and a craft knife To develop your understanding of health and safety	HEALTH AND SAFETY, NETS KNOWLEDGE, USE OF TOOLS AND EQUIPMENT To continue to develop knowledge of cutting out your nets To gain knowledge of folding your net	HEALTH AND SAFETY, NETS KNOWLEDGE, USE OF TOOLS AND EQUIPMENT To gain knowledge of applying adhesive To assemble the net.	EVALUATION AND FINAL ASSESSMENT To test and evaluate your product To assess the progress you have made.
Learning outcomes	- To work safely when in a Graphics environment. Basic understanding of task set and possibilities discussed. Understand styles of type. - Clear understanding of task set. Possibilities discussed and recorded, questions posed, further research highlighted. Understand what type is are used for. Can record and create own brief. - Task analysis conducted in great detail, target market identified and users' needs highlighted. Wide variety of possibilities recorded Can explain in detail what styles of type are used for and why. Started to create clear choices for product.	- Describe what the product will be like. A basic block repeat pattern is created with little change to the one shown. Understand how to use 2D design to a basic level. - Can justify why they have create their rule is important. Can create more creative block repeat pattern with a consideration of colour choices. Can record how they have created the pattern. - can reference where in their previous work this information has come from. Can create more creative block repeat pattern with a consideration of colour choices and their target market fully justified. Can analyse and be critical of their own work.	A brick and half drop repeat pattern is created with little change to the one shown. Understand how to use 2D design to manipulate an image. -Can create more creative brick and half drop repeat pattern with a consideration of colour choices. Can record how they have created the pattern. - can reference where in their previous work this information has come from. Can create more creative brick and half drop repeat pattern with a consideration of colour choices and their target market fully justified. Can analyse and be critical of their own work.	- A diamond repeat pattern is created with little change to the one shown. Understand how to use more elements of 2D Design. Able to apply design to a net. -Can create more creative diamond repeat pattern with a consideration of colour choices. Can record how they have created the pattern. Able to apply net to design and print accurately. - can reference where in their previous work this information has come from. Can create more creative diamond repeat pattern with a consideration of colour choices and their target market fully justified. Can analyse and be critical of their own work. Able to independently apply design to a net and work.	- Understand basic knowledge of net and what different lines indicate on a net. Students show an understanding of how to work safely with both scissors and craft knives in the classroom on 3 nets. - Students will accurately cut out net showing understanding of the key they have been shown for different lines on 4 nets. - Students will have accurate cut out all the net they have produced demonstrating precision and safety on 5 nets.	-Students show an understanding of how to work safely with an embossing pen in the classroom on 3 nets. - Students will have accurately scored net showing understanding of the key they have been shown for different lines on 4 nets. - Students will have accurately scored all the net they have produced demonstrating precision and safety on 5 nets.	Students show an understanding of how to apply adhesive and construct their 3 nets safely in the classroom. - Students will have applied the adhesive and constructed their 4 nets showing understanding of the key they have been shown for different lines on 4 nets. - Students will have accurately applied adhesive and constructed their 5 nets demonstrating precision and safety.	- Student will describe what their strength and weakness are within the subject. Students will demonstrate a basic understanding of subject knowledge through test result. - Students will reflect upon what their strength and weakness have been with the course and explain their thoughts. Students will demonstrate some understanding of subject knowledge through test result. - Students will justify way in which they can improve upon how they have performed within the subject. Students will demonstrate a clear understanding of subject knowledge through test result.

Design & Technology Curriculum Aims

<p>Required Skills</p>	<p>Explain health and safety Read and highlight the key words in the brief. - Explain what ACCESS FM stands for. - Complete the mind map exploring all the possible options for the projects under each of the headings. - Indicate around the mind map areas which they could explore in their research. - Generate a brief explain which gender and age group they are going to design make something for. - Typography is explained. Explain the basics in terms of what they are used for, serif and examples. - Identify fonts given into the 2 groups. Explain where real life these fonts are used. Students will create their specification. - Create a list of rules written in full sentences. - Explain why the point written in the first column is important. - Reference previous work to explain how they have generated the point.</p>	<p>- Complete specification. - Understand repeat pattern terminology. - Demonstration on how to create a block pattern. - Create a block pattern which is similar to the on the board change the colours - Demonstrate understanding by create their own block design using the principles shown. - Evaluate work produced - Create step by step. - Demonstration on how to create a brick pattern. - Create a brick pattern which is similar to the on the board change the colours</p>	<p>- Recap process from last lesson - Demonstrate understanding by create their own brick design using the principles shown. - Evaluate work produced - Create step by step. - Demonstration on how to create a half drop pattern. - Create a half drop pattern which is similar to the on the board change the colours. - Demonstrate understanding by create their own half drop design using the principles shown. - Evaluate work produced - Create step by step</p>	<p>- Demonstration on how to create a Diamond pattern. - Create a diamond pattern which is similar to the on the board change the colours. - Demonstrate understanding by create their own diamond design using the principles shown. - Evaluate work produced - Create step by step - Demonstrating how to transfer patterns on to readymade nets. - Create their design onto nets.</p>	<p>- Understand the difference between cut lines, fold lines and glue areas. - Demonstrate to students how to cut their nets using Scissors and craft knife safely. Rules about classroom safety will be clearly outlined. - Students will them cut out the outsides of the net using scissors. - Any inside line students will be shown how to use a craft knife.</p>	<p>- Demonstrate to students how to fold their net accurately, students will be shown how to use an embossing pen to score their net and then use a ruler to fold each dotted line. - Remind students the difference between solid, dotted and hatched lines. Students will fold all line on both nets before moving on. <i>If completed can them move on to applying double sided tape.</i></p>	<p>- Demonstrate to students how to apply double sided tape. Students shown how to use excess tap to minimise waste - Remind students they need to apply tape to all the tabs before they start to peel and remove the backing. - Double sided tape goes on the hatched lines on the nets. - Students will complete assembling their nets</p>	<p>- Comparing their design to the specification - Explain and justify how well they have performed in this module. Working through strengths and weaknesses - Photograph work and print out image to go on the front of students booklets - Students will complete a 30 minute test about what they have learnt in the module they have just completed.</p>
<p>Skills & content revisited</p>	<p>Build on any prior knowledge students have gained at KS2 and experience in Year 7</p>	<p>Build on any prior knowledge students may have gained at KS2 and experience in Year 7 Development new skills of using 2D design to create Designs.</p>	<p>Development new skills of using 2D design to create Designs. Develop skills in Evaluation of the work he has produced.</p>	<p>Development new skills of using 2D design to create Designs. Develop skills in Evaluation of the work he has produced.</p>	<p>Build on any prior knowledge students may have gained at KS2 and experience in Year 7. Developing Knowledge of using specialist making equipment and processes.</p>	<p>Build on any prior knowledge students may have gained at KS2 and experience in Year 7. Developing Knowledge of using specialist making equipment and processes.</p>	<p>Build on any prior knowledge students may have gained at KS2 and experience in Year 7. Developing Knowledge of using specialist making equipment and processes.</p>	<p>Build on prior knowledge evaluation and assessment of their progress.</p>
<p>Assessment</p>	<p>Open & Directed questions. Work produced Discussion based questions dissecting the design brief. Verbal feedback and booklet assessment where necessary throughout project.</p>	<p>Open & Directed questions. Group work when initially analysing product. Peer assessment when product analysis is complete. Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Open & Directed questions. Group discussions Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Self reflection of what they have achieved. Open & Directed questions Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Self reflection of what they have achieved. Open & Directed questions Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Self reflection of what they have achieved. Open & Directed questions Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Students continually evaluate/assess accuracy of work. Check accuracy. Verbal feedback and booklet assessment where necessary throughout project</p>	<p>Students continually evaluate/assess accuracy of work. Check tolerances regularly. Verbal feedback and booklet assessment where necessary throughout project Final teacher assessment Formal test.</p>
<p>Literacy</p>	<p>Subject specific terminology: Design brief, Aesthetics, Cost, Consumer, Environment, Safety, Size, Function, Material, Sans Serif, Serif, Typography, Specification, Task Analysis. Students will find definitions for Specification, Serif and Sans Seirf. Students will need to analyse the task set. Students will use simple statements or sentences. Students will pose questions considering further investigation into task. Students will be talk through sentence structure and using Conjunction to explain their thoughts.</p>	<p>Subject specific terminology: Repeat pattern, Block, brick, target market, Step by step, evaluation. Design. Students will describe the process used to produce their design. They will need evaluated design by being critical and justifying their thoughts and opinions.</p>	<p>Subject specific terminology: Repeat pattern, brick, half drop, target market, Step by step, evaluation, design. Students will describe the process used to produce their design. They will need evaluated design by being critical and justifying their thoughts and opinions.</p>	<p>Subject specific terminology: Repeat pattern, diamond, target market, Step by step, evaluation, design. Students will describe the process used to produce their design. They will need evaluated design by being critical and justifying their thoughts and opinions.</p>	<p>Subject specific terminology: Scissors, cut, craft knife, cutting mat, safety rule, dotted line, Fold line, cut line, solid line, glue area, hatched line. Perspective drawing, horizon line, vanishing point, construction line.</p>	<p>Subject specific terminology: Score, embossing pen, cutting mat, safety rule, dotted line, Fold line, creasing bar. Perspective drawing, horizon line, vanishing point, construction line.</p>	<p>Subject specific terminology: Adhesive, double sided tape, glue area, hatched line. Perspective drawing, horizon line, vanishing point, construction line.</p>	<p>Subject specific terminology: Evaluation, comparison. Students will describe the process used to produce their design. They will need evaluated design by being critical and justifying their thoughts and opinions. Student will explain why and how their design has met the criterial they have initial set at the beginning of the project.</p>
<p>Numeracy</p>	<p>Creating a cost understanding profits Shapes</p>	<p>Seeing patterns within a design, using shapes</p>	<p>Seeing patterns within a design.</p>	<p>Seeing patterns within a design using shapes</p>	<p>Measuring on homework sheet, developing skills with a ruler.</p>	<p>Measuring on homework sheet, developing skills with a ruler.</p>	<p>Measuring on homework sheet, developing skills with a ruler.</p>	<p>Working out cost and profits.</p>
<p>Resources</p>	<p>Booklet, pens, pencils, literacy mats, teacher PP to support learning. Example work</p>	<p>Booklet, pens, pencils, literacy mats, teacher PP to support learning. Example work, Computer, video demonstration Evaluation (H/W)</p>	<p>Booklet, pens, pencils, literacy mats, teacher PP to support learning. Example work, Computer, video demonstration. Evaluation (H/W)</p>	<p>Booklet, pens, pencils, literacy mats, teacher PP to support learning. Example work, Computer, video demonstration. Evaluation (H/W)</p>	<p>Practical folder wallets, Craft knife, Scissors, cutting mat, safety rule, nets, teacher pp to support learning, example work. Perspective (H/W)</p>	<p>Practical folder wallets, embossing pen, cutting mat, safety rule, nets, teacher pp to support learning, example work. Perspective (H/W)</p>	<p>Practical folder wallets, double sided tape, Scissors, nets, teacher pp to support learning, example work. Perspective (H/W)</p>	<p>Booklet, pens, pencils, literacy mats, teacher PP to support learning. Example work, Test papers</p>

Design & Technology Curriculum Aims

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
9	Appreciation of Sports and the arts	Opportunities for participation both in school and off site. Extra-curricular clubs.