

Design and Technology

Year 7 - Textiles



Name: Team: Set:

Your target for this year is to

Autumn Assessment		Spring Assessment		Summer Assessment	
Effort: 1,2,3,4 Behaviour: 1,2,3,4		Effort: 1,2,3,4 Behaviour: 1,2,3,4		Effort: 1,2,3,4 Behaviour: 1,2,3,4	
1 - Exceeding expected target		1 - Exceeding expected target		1 - Exceeding expected target	
2 - Reaching expected target		2 - Reaching expected target		2 - Reaching expected target	
3 - Not yet meeting expected target		3 - Not yet meeting expected target		3 - Not yet meeting expected target	
Homework	y/n	Homework	y/n	Homework	y/n

Autumn term pupil set goal:- _____ Date.....

Spring term pupil set goal:- _____ Date.....

Summer term pupil set goal:- _____ Date.....

Teacher _____

Test Score _____



KS4 & KS5 options and career pathways



Engineering
Graphic Design
Textiles
Construction
Product Design
Food & Hospitality



KS3 Design Technology Learning Journey



End of KS3 Test
Progression to
GCSE 9-1 Design
Technology, L2
Engineering, L2
Textiles, L2
Graphics, L2
Construction, L2
Hospitality and
Catering



Food Practical
Explore your culinary skills by planning and making dishes such as fresh pasta, cottage pie, samosas, lasagne and Victoria sponge.

Product Design-Wooden Amplifier Project
Make and modify your own amplifier speaker for your mobile phone



Textiles Upcycling Revolution:
Eco festival project

Evaluation: Evaluation and improvements to the functionality and aesthetics of the products

Year 9 lesson structure
Move around the department on a carousel cycle – You will visit Food, Textiles and Product Design throughout the year, giving you a great taste of things to come in KS4

YEAR 9

Control Systems:
Microcontrollers and embedded intelligence

Nightlight Packaging: Making skills
Logo, branding and packaging. Hand skills and digital design

Nightlight: Making skills
CAD/CAM, hand tools, laser cutter, soldering

CAD DRAWING
Design
Produce design ideas & technical drawings to help you plan, both by hand and by CAD

Nightlight: Working to a design brief
Research, design and develop a working nightlight using wood, plastics and electronics.

Nightlight: Make Tasks
Put your design ideas into practice using a range of materials, new tools, equipment and techniques.

Stitch a Selfie:
Drawing with Stitch- Turn your selfie into an embroidered piece of Textiles.

Mechanisms: Explore the power of linkages, CAMs, gears and levers through designing and making CAM toys and linkage puppets

Mechanisms -Pop-up Card
Explore paper engineering and mechanisms

New Techniques
Computer Aided Design, mechanisms and linkages, machine skills, pattern printing, transfer printing, tie-dye, laser cut

Evaluate your outcomes
Modifications, further developments and improvements

SUSTAINABILITY

Sustainable Design
Positive Vibes project

CAD CAM
Embroidery

YEAR 8



Graphic Design
An introduction to graphics – colour, typography, logos, branding

Make Task
Bring your designs to life using a range of materials, tools, equipment and techniques to create a prototype of your idea.

Design Task
Design and communicate your ideas through sketching and annotation

Responsible designers,
sustainability, materials

Workshop health and safety

Introduction
What is Design Technology?
Career pathways and the industry
CRITICAL THINKING
problem – thinking – solution

YEAR 7

Year 7 Textiles End Points



Research and topic introduction

- ☐ Know about an increasing range of designers, engineers, chefs, technologists and manufacturers and be able to relate their products to their own designing and making
- ☐ Know how to follow procedures for safety and understand the process of risk assessment
- ☐ Know how to consider the influence of a range of lifestyle factors and consumer choices when designing products
- ☐ Know how to analyse where human values may conflict, and compromise has to be achieved
- ☐ Know how to research the health and wellbeing, cultural, religious and socio-economic contexts of their intended users
- ☐ Know how to investigate and analyse the positive and negative impact that products can have in the wider world
- ☐ Know developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists Design and technology.
- ☐ Know how to use specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
- ☐ Know how to develop and communicate design ideas using annotated sketches

Design and Planning

- ☐ Know how to combine ideas from a variety of sources
- ☐ Know how to use a variety of approaches to generate creative ideas and avoid stereotypical responses
- ☐ Know how to develop and communicate design ideas using annotated sketches
- ☐ Know how to research the health and wellbeing, cultural, religious and socio-economic contexts of their intended users

Practical

- ☐ Know how to select appropriately from specialist tools, techniques, processes, equipment and machinery, including computer-aided manufacture
- ☐ Know how to use a broad range of manufacturing techniques including handcraft skills and machinery to manufacture products precisely
- ☐ Know how to use a broad range of material joining techniques including stitching, mechanical fastenings, heat processes and adhesives
- ☐ Know how to investigate and develop skills in modifying the appearance of materials including textiles and other manufactured materials
- ☐ Know investigate and develop skills in modifying the appearance of materials including textiles and other manufactured materials e.g., dying and applique
- ☐ Know how to use CAD/CAM to produce and apply surface finishing techniques

Technical Knowledge

- ☐ Know about textile fibre sources e.g., natural and synthetic and fabrics e.g., plain and woven

Evaluate

- ☐ Know how to actively involve others in the testing of their products
- ☐ Know how to evaluate their products and identify ways of improving them

Date:

Textiles - Health & Safety



Effort grade

1 2 3 4


Date:

Health and Safety



- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____

List safety rules for the Textile Workroom. Look at the images above to help.

Effort grade  1 2 3 4

The Sewing Machine

Can you name the parts of the sewing machine?
Do you know what these parts do?



Machine Part	Function

Did you know?

This year, Cowley school is all about 'Positive Vibes'. We have decided to embrace the 'Positive and banish the 'Negative'.


Being Positive creates a positive atmosphere and promotes trust and kindness.

Design Brief - Your task is to:

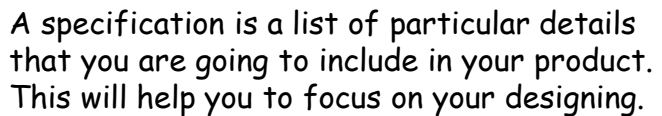
To create a fabric banner, to promote positivity about a theme that is important to you or to raise awareness about a campaign that you feel strongly about.

With a focus on sustainable design, we would like you to get creative and upcycle as much unused and unwanted materials as possible.

Specification



What is a specification?



A specification is a list of particular details that you are going to include in your product. This will help you to focus on your designing.

We use the acronym ACCESSFM to create a specification.

A	Appearance	
C	Cost	
C	Customer	
E	Environment	
S	Size	
S	Safety	
F	Function	
M	Materials	

Sample Techniques

After sampling decorative techniques and construction techniques, attach to page and evaluate each one.

Attach here:

What went well?.....
What could be improved?.....
Will you use it? Why?.....

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What went well?.....
What could be improved?.....
Will you use it? Why?.....

Sample Techniques

After sampling decorative techniques and construction techniques, attach to page and evaluate each one.

Attach here:

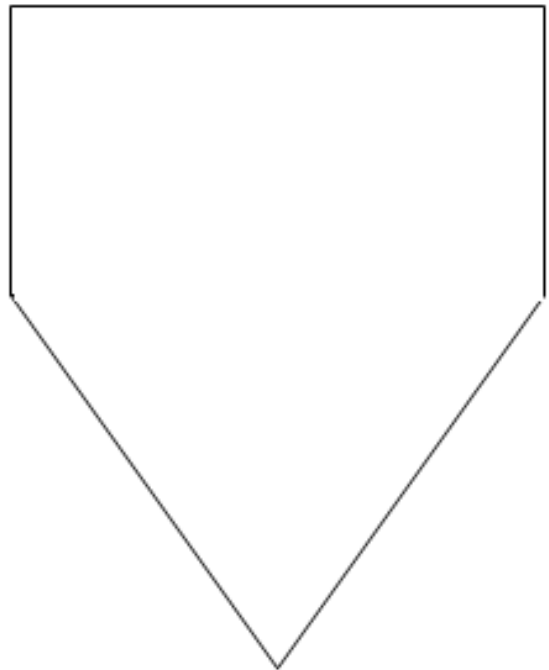
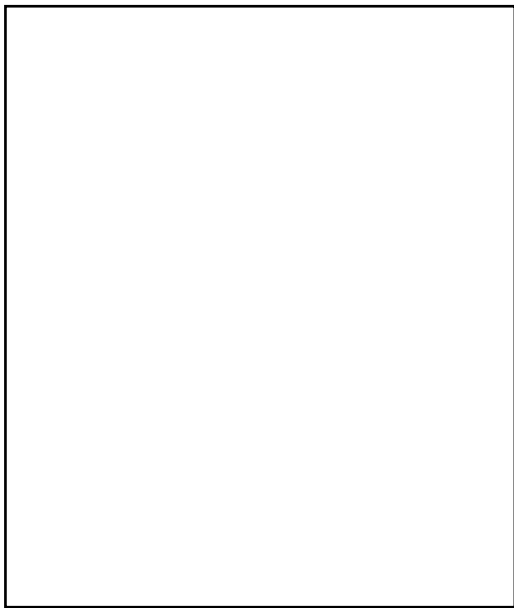
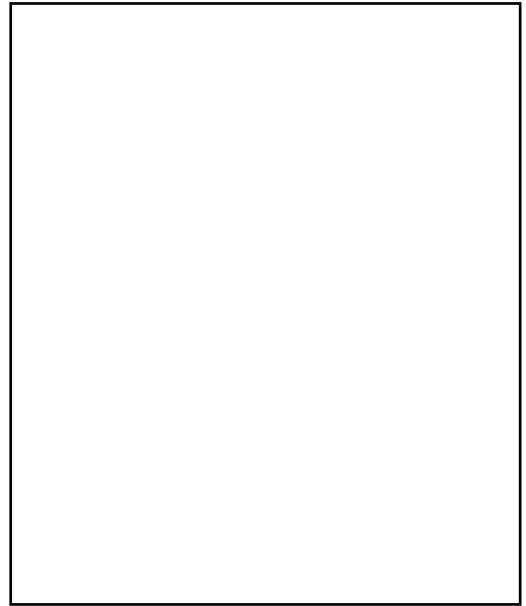
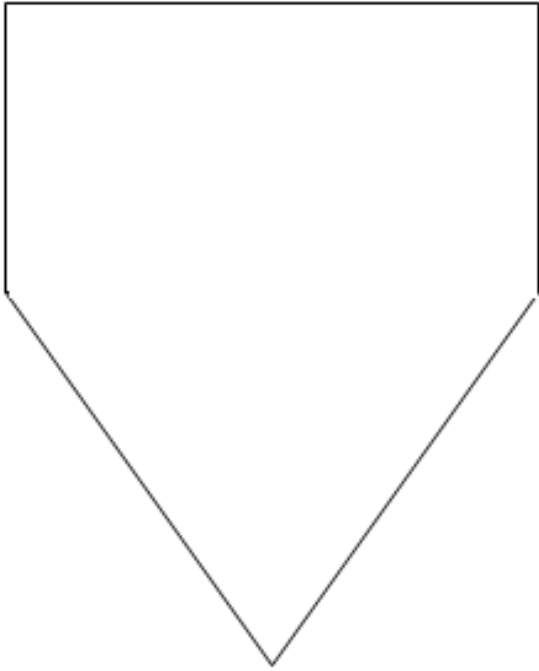
What went well?.....
What could be improved?.....
Will you use it? Why?.....

Attach here:

What went well?.....
What could be improved?.....
Will you use it? Why?.....

Date:

Design Ideas



Effort grade




1 2 3 4

Date:

Final Idea

Draw your **FINAL** idea for your 'bag for life' and annotate (this means to label).

Peer Assessment - ask a friend to complete this section

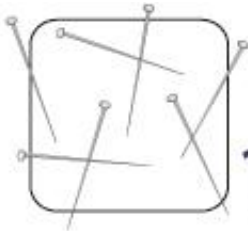
 star	
 star	
 wish	Sign here:

Effort grade

1 2 3 4

Textiles Equipment

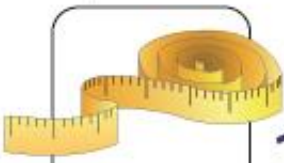
Identify the equipment below and add two more pieces of equipment that you have used in this project.



1



7



2



8



3



9



4



10



5



11



6



12

Evaluation

Answer all question in full sentences.

What do you think of your finished product?

.....

.....

Who is it for?.....

What went well?

.....

Is your finished product the same as your final design? Why?

.....

.....

If you were to complete the project again, what would you do differently?

.....

.....

What parts of the project did you find easy? Why?

.....

.....

What parts of the project did you find difficult? Why?

.....

What action will you take to improve your practice?

.....

.....

Have you disliked anything about this project?

.....

.....

Give yourself an effort grade for the project:.....

Can you improve your effort? How?

.....

.....

Effort grade

1 2 3 4



Date	Practical Skill	What I did and how I did it	Detailed labelled diagram	What went well? Even better if...	Teacher signature
				WWW- EBI-	
				WWW- EBI-	

Date	Practical Skill	What I did and how I did it	Detailed labelled diagram	What went well? Even better if...	Teacher signature
				WWW EBI	
				WWW EBI	
				WWW EBI	
				WWW EBI	

PASSPORT



HEALTH
AND
SAFETY

Sewing Machine

Demonstration given ☐

Passed Driving test ☐

Date _____

Signed _____



Hand Sewing Needles

Demonstration given ☐

Date _____

Signed _____



Iron

Demonstration given ☐

Date _____

Signed _____



Fabric Scissors

Demonstration given ☐

Date _____

Signed _____



Heat Press

Demonstration given ☐

Date _____

Signed _____



Glossary

Biodegradable	Materials that can be broken down in the environment by micro-organisms.
Carbon Footprint	The measure of how much carbon is used through the activities of a person, a company or a country.
Developing Country	A country that has little industry and lacks access to healthcare or education.
Embroidery	The craft of decorating fabric with thread or yarn, this can be done by hand or machine.
Environmental Design	Designing products ensuring minimal impact on the environment.
Environmental impact	How much effect something has on the world
Ethics	Moral decisions when designing and manufacturing.
Fairtrade	Better prices, decent working conditions, local sustainability, and fair terms of trade for farmers and workers in the developing world
Flame retardant	fabric is chemically protected against the risk of fire
Global Warming	The rise in average temperature of the earth's surface.
Hand crafted	This is where useful and decorative objects are made completely by hand or by using only simple tools.
Hem	Used to stop fabric from fraying on cut edges
Insulate	To help maintain temperature.
Layplan	How the pattern pieces should be laid out on fabric.
Lifestyle	The way a person or group lives, including patterns of social relations, consumption, entertainment and dress.
Non-finite resource	A resource that can be easily replaced, e.g. soft woods, solar power, wind power, natural fibres
Non-renewable resources	Resources that take too long (say more than one human lifetime) for natural processes to replenish them.
Nylon	A thermoplastic that can be made into fibres for clothing, films for food packaging or shaped for electrical equipment.

Glossary Continued

Microfibre	A synthetic fibre which is much finer than a human hair.
Petrochemicals	Petrochemicals are the chemical products obtained from petroleum by refining.
Quilting	The process of sewing two or more layers of fabric together to make a thicker material. This structure can help to protect items and also maintain temperature.
Regenerated fibres.	Regenerated fibres are created by dissolving the cellulose area of plant fibre in chemicals and making it into fibre again
Social responsibility	The idea that a designer needs to evaluate the impact their product could have on society and take action to make this better.
Stain resistant	Fabric that is chemically protected against stains affecting fibres
Supply Chain	A system of organizations, people, activities, information, and resources involved in supplying a product or service to a consumer.
Sustainable	Capable of being maintained at a certain level for a long time.
Sustainable development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Sweatshop	A place, workshop or factory where people are forced to work long hours or in harsh conditions.
Tolerance	The minimum and maximum measurements that can be accepted when manufacturing.
Toxic Waste	Toxic waste is any unwanted material in all forms that can cause pollute the air and contaminate soil and water.
Transfer paper	Colour designs can be transferred onto fabric by ironing
Working Drawing	A drawing that contains enough information needed for a third party to manufacture a product from scratch.
Zero Waste	A set of principles focussed on waste prevention by encouraging redesign of resource life cycles so that all products are reused. The goal is for no waste to be sent to landfills, incinerators, or the ocean.