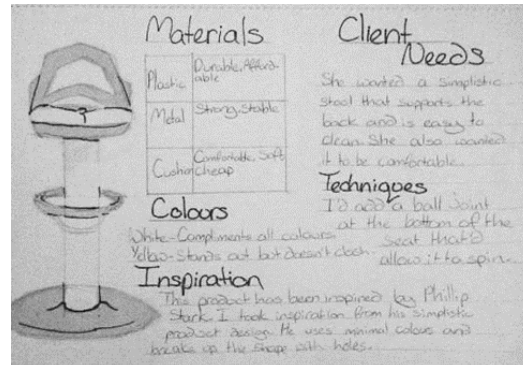
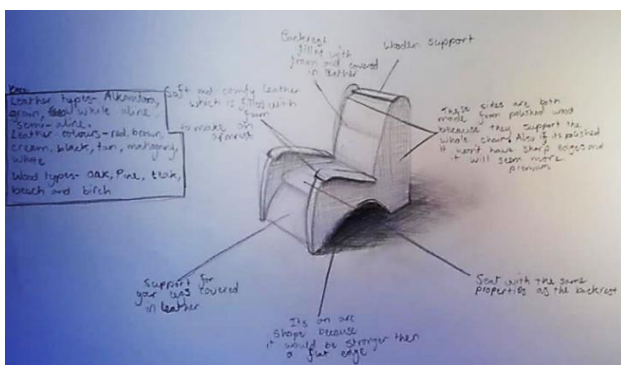
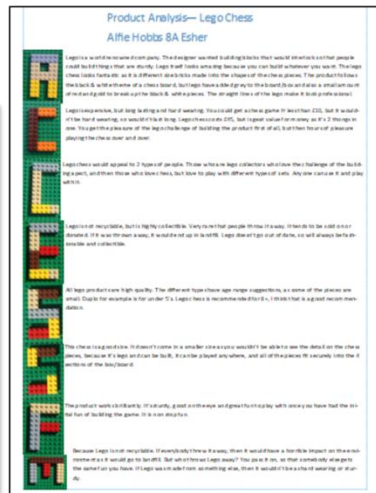
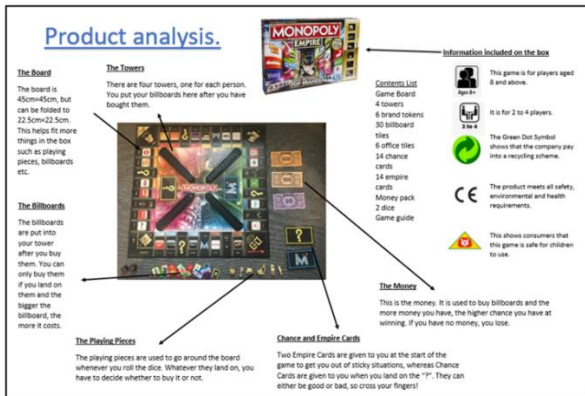


In Design and Technology at KS3 we have been completing projects based on the Design process and practicing skills of independent research, product analysis, sketching techniques, modelling and design development. We have also been learning about the theory side of Design and technology by looking into materials like papers, boards and textiles and we have recently started to consider the environmental impact of designing new products. We have been thrilled with the work that's been produced and have received messages from students telling us how much they are enjoying their design work. We've even been learning from our students during this time, as some students have been creating work in really ingenious ways. For example using 'itailor' software and Nike's customise your own trainers. Below are some examples of the wide range of outcomes.





### Evaluating my ideas and the models

#### Model 1

**Positives** – Lots of storage, cool design with clear inspiration  
**Improvements**- Ensure the model for storage is sturdy as wobbled with any weight applied to top.

#### Model 2

**Positives** – Inventive idea, nice way to store pens.  
**Improvements**- Impractical, needs more storage space and better idea to be able to store pens.

### Final Design Proposal

My draft design

**How does it suit the client?**  
It is the right size and price and environmentally friendly

**How it has been inspired by the designer you have chosen?**  
I liked the style of Norman Foster's architecture with the use of height and curves

**What materials will I use and why?**

- Plywood (for the base)
- metal tubing (for the pen holders)
- sheet metal (for the curved hole punch holder). These materials architectural looking and recyclable.

**What techniques will I use to make it?**

- Sawing for plywood base and metal tubing
- Hole drilling into plywood base for metal tubes
- Bending for sheet metal to form curved section
- Glue for metal tubes onto the base and sheet metal curved section onto base

### sail cloth

sailcloth is used in many materials like flax, hemp, cotton or in different forms like synthetic fibers like nylon, polyester, aramid and carbon fibers in different woven, spun and molded textiles.

Most woven materials are made from polyester also known as Dacron that was introduced by Bainbridge as a replacement for cotton in the 50's. wovens are very durable making them ideal for cruising sails. Laminates are made by bonding together layers of different materials to form a sandwich.

Sailcloth is more waterproof than traditional choices because it has four layers of protection. An ultrathin layer of PET that acts as a waterproof barrier because it's a film, not a woven fabric. Sailcloth is also more durable than traditional materials, with abrasion resistance and fray prevention built into the fabric.

hook at back of shoe to ease foot in

for the colour scheme I am using fabric similar colour with orange, red and brown

Converse-style mesh design but comfort base like exercise shoes

Conceal pull-on shoe with hook

I am going to use a device for the shoe as it is easy to use orange and red for the colour of the shoe.

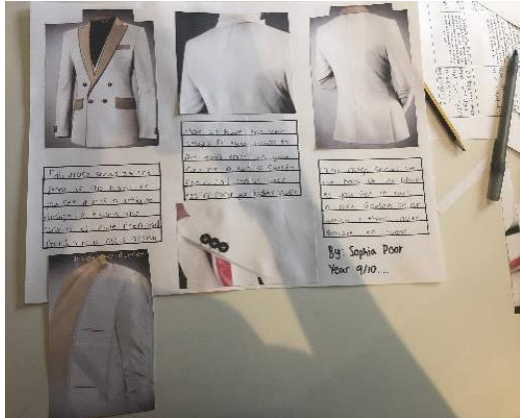
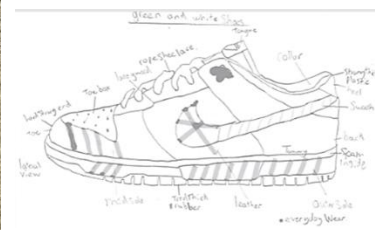
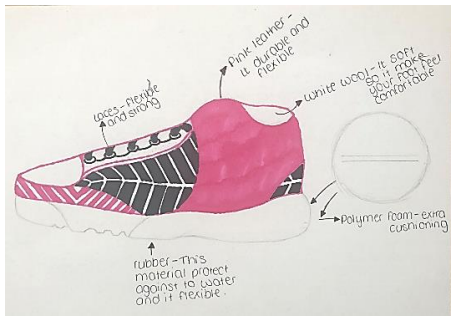
This shoe is also going to be made from a flexible material to ease the foot in

No distinguished pattern on the material only paint like patterns dipping across the orange to the red.

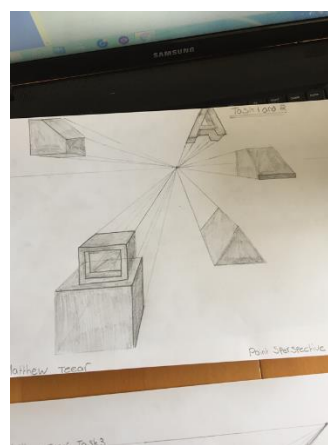
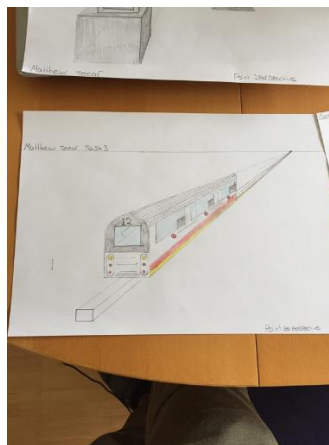
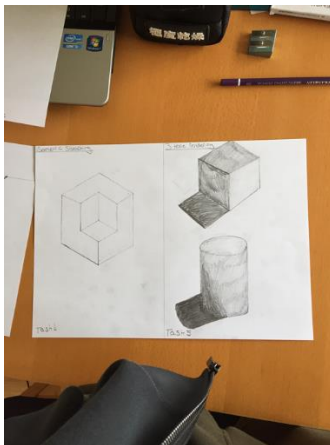
foam base, thin spring for maximum comfort

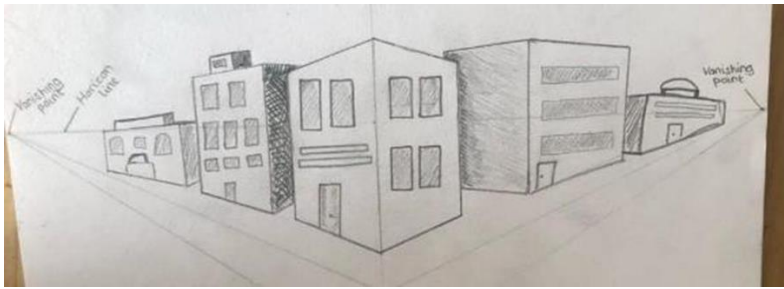
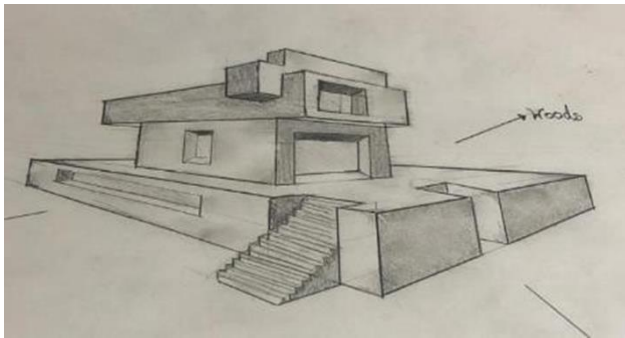
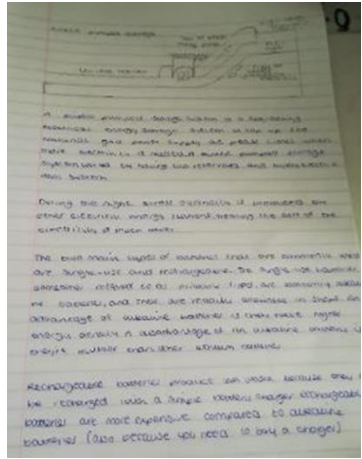
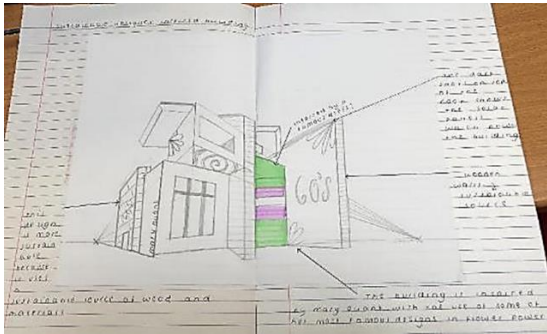
Questions: Does it suit the client? 5/5, 4/5, 3/5, 2/5, 1/5, 0/5 million points

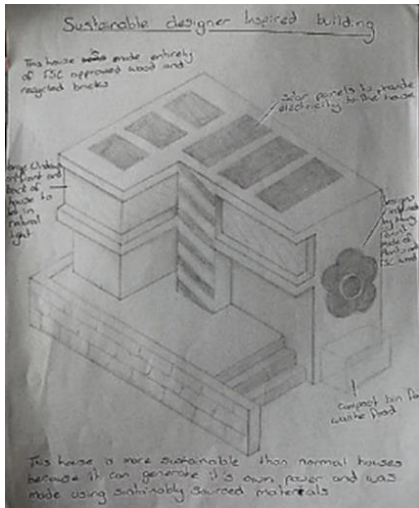




At KS4 we have been studying a wide range of Design theory topics from sustainable materials, iconic designers, energy generation and storage and technical drawing techniques. They have had to combine all these elements to produce a creatively designed building that is environmentally friendly. This is a snapshot of the fantastic work. It's clear to see there's a lot of time and effort going in to work at home. Well done Year 10!







**Mary Quant**

British fashion designer & icon of the 60s  
Flower Power

**MARY QUANT'S LIFE**

Mary Quant was born in 1934 and is now 86 years of age. She is well known across the globe for her iconic hairstyle and her pictures on the cover of Vogue! One of her most well-known pieces are the mini-skirt and hot pants. These are her most famous ideas!

Both of Mary Quant's parents worked as teachers when she was born in London. Quant went to Backhurst High School for education and continued to Goldsmiths College to study illustration. In 1954, was when she met Alexander Plunket Greene. He was her business partner and future husband. In 1967, the couple married, and sadly in 1996, her husband passed away. The couple however had one child called Oriana.

**CANNARY STREET**

Cannary Street is a very popular street situated in London. Many famous designers had shops there as it was the birthplace of the swinging sixties! It is the home of punk, skin heads and new romantic. Cannary always will be the epitome of culture and lifestyle in London's West End. Mary Quant had a shop here which she was famous for hosting!

**INSPIRATION**

Mary Quant was inspired by pop art because of the graphic qualities of artists such as Andy Warhol. This influence also seen in her skirts and leggings, in which she used popping and five colours in her designs. This was a turning point in history and helped show that women could wear whatever they desired. The word was traditional materials such as PVC and plastic for use in clothing and accessories.

**LOGO**

Her logo was very clearly inspired by the flower power of the time hence the flower as a logo. Although the original logo is black and white in some of her creations it is shown in different colours bringing a whole new effect!



**The jersey dress**

Quant was the figurehead of the jersey dress boom. She produced thousands of different designs in a huge array of different colours and styles. This included different collar shapes, sleeves, zips, buttons and skirt shapes.

While frame-knit jersey was used since the 17th century for undersweat, it was only after World War 2 that synthetic fibres became cost-effective in mass production and new fabrics were being produced by machines up to 10 times more efficient than looms used traditionally. The production change led Quant to see potential in easy jersey clothes as outerwear. Pull-over pinafore jersey dresses were a key part of Quant's first Ginger Group collection, launched in late 1963.



They were cheaper than her tailored wool dresses and bonded wool jersey soon became her go-to option. It gave the stretch and structure she needed for her designs. The designs were practical, affordable, colourful and crease resistant, making them a driving force in the democratisation of style.

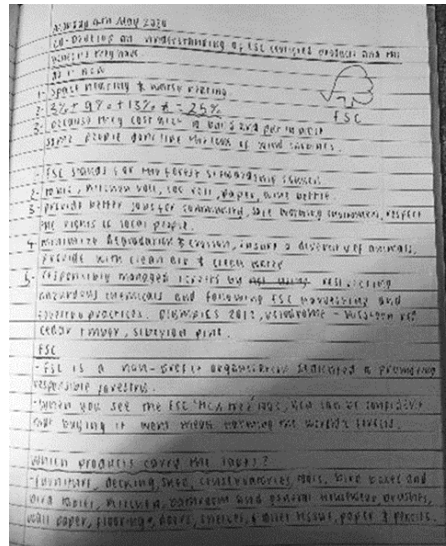
**Product profiles**

**The skinny-rib sweater**

The inspiration for the skinny-rib sweater came from childrenswear. In her autobiography, Quant said that she 'pulled on an eight year old boy's sweater for fun' and that she was 'enchanted' with the result.

Sweaters paired with pinafores were the building blocks in Quant's Ginger Group – the wholesale label she formed in 1963. By 1964, the collection also included 'Adam's Rib' which was a skinny sweater with 1/2 length sleeves that was available in black, pink and jade.

Since the 1960s, the skinny-rib sweater has retreated and returned to be a practical way to add contrasting colour to an outfit. None of the original Quant skinny-rib sweaters have been found which suggests how useful they were.



We've been delivering our work in a variety of ways from Quizzes through SMHW, Scaffolding sheets to support learners, Exemplar materials, Video clips used to explain techniques and model outcomes, Do it now tasks, and teacher explanation through recorded sound clips. We've also been preparing our year 10's by giving them regular exam questions to practise linked to the topics we've been studying.

**Annotation help sheet for task 2.**

Where are the traditional sources for your house and are they sustainable?

How have they been powered in a sustainable way?

You should reference your design research. Digital elements of your design have been influenced by your research. Reference your design research in your annotations, sketches, materials and texture.

**Summary** Here you should write a paragraph explaining how your design is more sustainable than existing houses.

**10** The year assigned to design a sustainable building (inspired by the work of a designer and their movement)

Will your home generate its own power?

How will the water be heated?

How will the home be heated?

How will lighting and sockets be powered?

How will the home be insulated and cooled?

How could waste be used?

**Resistant Materials Energy Sources and Generation Quiz**

4/5 Score

0:11 Time

Look at the image - what type of energy generation system does it show?

1 Hydroelectric 2 Tidal

3 Solar 4 Biomass

5 Wind 6 Nuclear

Review Quiz Done

**Do it now task**

Which has your country and others chosen to do?

**UK electricity generation**

How much electricity is generated in the UK? How much is generated by different sources?

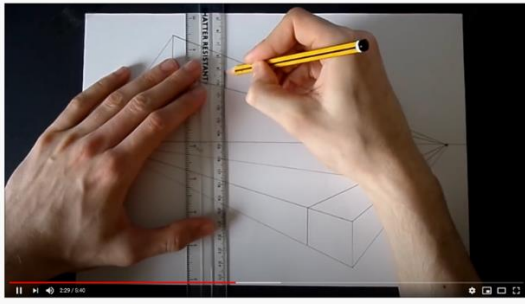
1. Study the illustration (A). What two activities consume the most energy in European homes?

2. Study the pie chart what percentage of UK power has been generated by renewable sources?

3. Can you give 2 reasons why people might be opposed to building wind farms?

**10** Develop an understanding of FSC certified products and the benefits they have.





## Careers that use these skills

### Interior designer

Interior designers plan and supervise the layout and decoration of the inside of buildings.



- 1 Point Perspective
- Horizon line
- Vanishing Point
- Guide lines



#### How to Draw Buildings

How to draw buildings. When you are drawing a building, you should use a ruler to draw straight lines. This is a good idea to start. Practice your drawing skills and once you have the mechanics down you'll be ready to start drawing more intricate structures.

Keywords: buildings, drawing, architecture

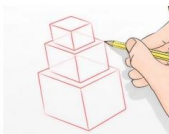
#### Tips

- Draw lightly in pencil so that you can easily rub out mistakes.
- If your overall goal is to draw very complex architecture (e.g., the Eiffel Tower), know that this is a good place to start. Practice your drawing skills and once you have the mechanics down you'll be ready to start drawing more intricate structures.
- If you need help drawing the cube, see Draw-a-3D-Box.

<https://www.wikihow.com/Draw-a-3D-Box>



<https://www.wikihow.com/Draw-Buildings>



### Example Exam Questions

#### Multiple choice example:

A method of raising money from lots of people to launch a new design is called:

- A A co-operative
- B Crowd funding
- C Fair trade
- D Virtual marketing

(Total 1 mark)

### Example Exam Questions

This logo is on product labels for some decorative cushions.



(a) List **three** principles of Fairtrade.

Principle 1 \_\_\_\_\_

Principle 2 \_\_\_\_\_

Principle 3 \_\_\_\_\_

(3 marks)

### Example Exam Questions

1. Explain the Advantages and Disadvantages of using Crowd Funding?

#### Advantages

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### Disadvantages

\_\_\_\_\_

\_\_\_\_\_

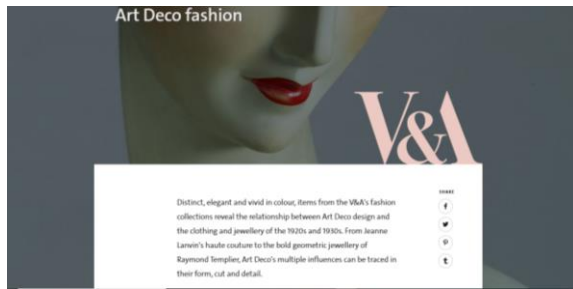
\_\_\_\_\_

(8 Marks)

We've been setting flexible learning tasks for those students who can fit it in with their studies. The Year 10 textiles student have been encouraged to watch the Great British Sewing Bee to support their knowledge of materials and techniques. Each week they are asked to send their prediction of the winner and their thoughts on favourite garments, techniques or suggestions to improve one of the items.



For our future GCSE students, we will also be asking them to complete some Design work by studying some iconic work in a virtual famous museum. Watch this space!.....



We have also encouraged our students to use some of the free Computer Aided Design software that's available out there. The links below might help students in completing your Design and Technology work at home.

Techsoft 2D design is a piece of software that we use in school for CAD when developing our designs. This company have released the software for free for all students and can be downloaded below. Why not have a play around with it and see what you can do!

<https://www.techsoft.co.uk/adverts/coronavirus-covid-19>

Google sketch up is also a very useful piece of CAD software. This is very easy to use and can help you to produce really impressive 3D drawings. Again the best way to learn how to use it is to have a go and play around.

<https://www.sketchup.com/plans-and-pricing/sketchup-free>

'FashionDesign' is an app you can download from your app store which gives you hundreds of different options when designing clothes.