

**Year 11 -12 Design Technology  
Transition Work  
2022**

**Welcome to Design Technology**

PREPARING FOR  
**A LEVEL DESIGN & TECHNOLOGY**



Summer 2022



## **Exam Board Information**

Specification – look at the product design section

<https://filestore.aqa.org.uk/resources/design-and-technology/specifications/AQA-7552-SP-2017.PDF>



## Be organised for the September start

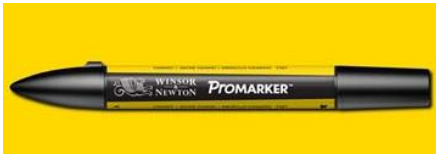
### Essential Equipment



A4 sketch pad  
Tiger/The Range are good value.



### Optional but useful to have:



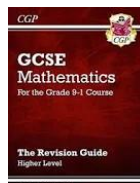
Small selection of render markers; you might like to wait until you've tried them in school first. The Range/ The Works are good sources of these but they are expensive so you only need a small selection.



Good quality eraser



Fine liner



Keep any GCSE Maths/D&T revision books for reference.



## Investigating...

TASK FOR YOU TO COMPLETE

Investigate the work of a designer and a **Design movement** of your choice.

What are their most significant products? What made their products more desirable than preceding products? What influenced them? What are they doing now? How have they influenced their design genre and other genres in their time?

This case study should be presented in a creative manner of your choice using images and annotation to describe, explain and evaluate.

Using your research, create your own designs for everyday products that are influenced by the design style of your chosen designer.

• Phillipe Starck • James Dyson • Margaret Calvert • Dieter Rams • Charles and Ray Eames • Marianne Brandt.

• Arts and craft movement • Art Deco • Modernism, e.g. Bauhaus • Post modernism, e.g. Memphis

### Useful links:

<https://designmuseum.org/designers>



TASK FOR YOU TO COMPLETE

## Try an exam question...

1 3 Compare the two radios shown in Figures 5 and 6.

In your answer you should refer to developments in:

- microelectronics
- materials.

[12 marks]

Figure 5




Figure 6




	Figure 5 Fabricated plywood valve radio (1950s)	Figure 6 Injection moulded digital radio (2015)
Button/control material	Thermoset polymer	TPE
Electronics	Thermionic valves	Integrated circuits
Main casing material	Fabricated plywood	Injection moulded thermoplastic
Information display	No display	LCD screen

### TIPS

- This question requires an answer in essay form which assesses the differences and similarities of the two radios.
- Have the products influenced (impact) other developments/products?
- The answer should seek to identify/expand on specific materials and components used and why?
- Hand write on lined paper just as you would in the A level exam.
- 12 marks = name six point and explain six point



# Designing...

TASK FOR YOU TO COMPLETE

## Context

Take a look at the three contexts on the next slide and the lists of prompts we have created for you. Choose one problem to solve.

1. (1 Page) **Analyse the context** using WHO, WHAT, WHERE, WHY, WHEN AND HOW.

2. (2 Pages) **Identify and investigate** genuine problems, issues, needs or difficulties based on your context analysis. What research information might be useful? Present what you collect succinctly.

3. (2 Pages) **Produce hazy ideas**

Sketch first ideas for possible solutions; quick sketches are idea for this with some labelling to identify key features.

4.(2 Pages) **Develop ideas**

Using client feedback, inspiration images, SCAMPER, further research information or other methods develop at least two of the first ideas in more detail. Add annotation to identify, explain and evaluate.

5. (2 Pages) **Present final design.**

Use basic physical modelling (take photos), presentation standard drawings and detailed annotation to identify, explain, give examples (materials etc.) and justify your designing.

## Submission

Work can be presented in any manner of your choice; hand drawn, use of ICT or a mix of both to suit.

See recommended activities for CAD available to you.

## Contextual challenges:

- Preparing for emergencies
- Outdoor Living
- Keeping fit and active

**TASK FOR YOU TO COMPLETE**

### *Preparing for emergencies*

- Emergency shelters
- Emergency food aids
- Emergency transport
- Emergency survival kits
- Emergency for the elderly
- Emergency for the young
- Emergency Diabetic kit
- Emergency first aid kit
- Emergency alert systems
- Emergency products for floods
- Emergency products for fire
- Emergency water solutions
- Emergency food packages
- Emergency transport for injured
- Emergency lightning
- Emergency clothing
- Emergency roadside assistance
- Emergency rape alarms
- Emergency within the workplace
- Emergency within the workshop
- Emergency signs
- Emergency logo and promotion
- Emergency tool kits

### *Outdoor Living*

- Outdoor cooking
- Outdoor cooking utensils
- Outdoor heating
- Outdoor shelters
- Outdoor lighting
- Outdoor games for children
- Outdoor entertaining
- Outdoor music
- Outdoor speaker
- Outdoor disposable items
- Outdoor sleeping
- Outdoor relaxing
- Outdoor food preparation
- Outdoor furniture
- Outdoor chairs
- Outdoor seating
- Outdoor planting
- Outdoor wildlife products
- Outdoor sensory products
- Outdoor disabled products
- Outdoor for the elderly
- Outdoor garden design
- Outdoor access for all
- Outdoor water features
- Outdoor sculpture
- Outdoor wellbeing products
- Outdoor eating promotions

### *Keeping fit and active*

- Gym products
- Water bottles
- Gym equipment
- Exercise products for the elderly
- Exercise products for the disabled
- Exercise products for the children
- Sensory exercise products
- Wellness products
- Screen time limiting products
- Outdoor gym equipment
- Products for a specific sport
- Designs for school
- Designs for home
- Designs for limited space
- Gym/sports storage
- Maps and orienteering
- Healthy eating
- Timers and trackers
- Posture related items
- Sports promotion for clubs
- Sporting events



**Recommended activities for  
A LEVEL DESIGN & TECHNOLOGY**



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# Watch these...

## **How to Make – New Series BBC 4**

Thursdays BBC Four 8PM or catch up on iplayer.

<https://www.bbc.co.uk/programmes/m000gwzg>

## **Soup cans and superstars BBC iplayer.**

Pop Art and its influence on the wider world.

<https://www.bbc.co.uk/programmes/b067ftp7>

## **Bauhaus 100 BBC iplayer**

The story of the design school and its influence on the world.

<https://www.bbc.co.uk/programmes/m0007trf>

## **Rams; principles of good design Vimeo**

[https://vimeo.com/304626830?fbclid=IwAR0F\\_pw\\_FKbVLDPKireqhpqXs1N1U8xE0IvmzGFxNaGUEEjIqKqUb9SaAVg](https://vimeo.com/304626830?fbclid=IwAR0F_pw_FKbVLDPKireqhpqXs1N1U8xE0IvmzGFxNaGUEEjIqKqUb9SaAVg)

## **First Secret of Good Design – TED talk**

<https://www.youtube.com/watch?v=9uOMectkCCs>

## **Biomimicry Design – TED talk**

[https://www.youtube.com/watch?v=k\\_GFq12w5WU](https://www.youtube.com/watch?v=k_GFq12w5WU)

## **Abstract: The Art of Design – Netflix**

<https://www.netflix.com/gb/title/80057883>



## Try these...

### **Design in a nutshell**

Design era talks plus try the quiz to find out which designer your design thinking is similar to.

[http://www2.open.ac.uk/openlearn/design\\_nutshell/](http://www2.open.ac.uk/openlearn/design_nutshell/)

### **Sketch-a-day**

Spencer Nugent developing sketching skills

[https://www.youtube.com/channel/UCBtSgEZk914z5InEs\\_U2J3w](https://www.youtube.com/channel/UCBtSgEZk914z5InEs_U2J3w)

### **Design Ventura Mini Challenge**

<https://ventura.designmuseum.org/2020/03/30/design-ventura-online-mini-challenge/>

### **Virtual Museums**

#### **V&A London**

Take a trip through their collections

<https://www.vam.ac.uk/collections?type=featured>

#### **Design Museum**

Digital Museum content

<https://designmuseum.org/digital-design-calendar>

#### **Design information**

<https://designmuseum.org/design>

#### **Designers' information**

<https://designmuseum.org/designers>



**Listen to these...**

**50 things that made the modern economy.**

Series of podcasts about all sorts of products that have changed the way we live; some surprising choices.

<https://www.bbc.co.uk/programmes/b08k9pv0>

**30 animals that made us smarter**

Series of podcasts about how studying animals and biomimicry has helped humans develop new products.

<https://www.bbc.co.uk/programmes/w13xttw7/episodes/downloads>

# **Optional activities for A LEVEL DESIGN & TECHNOLOGY**



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## **Quick design thinking activities**

### **#thinkdo activities**

<http://www.julieboyd.co.uk/free-resources/thinkdo-cards/thinkdo-quick-activities/>

### **Techdoodle activities**

<http://www.julieboyd.co.uk/free-resources/techdoodle-resources.html>



## **Other reading online**

### **Design Week Magazine Online**

<https://www.designweek.co.uk/>

### **Make Magazine Online**

<https://makezine.com/tag/uk/>

### **Science Focus online – links to materials and technology developments.**

<https://www.sciencefocus.com/>



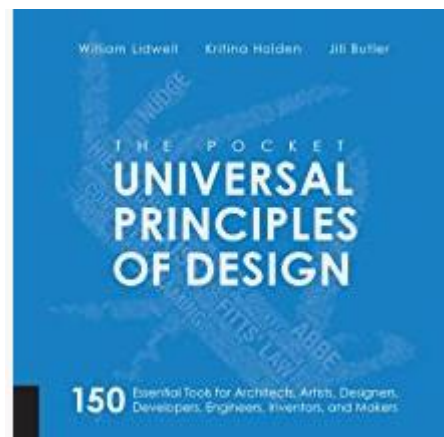
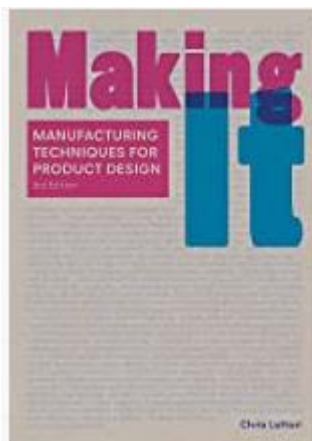
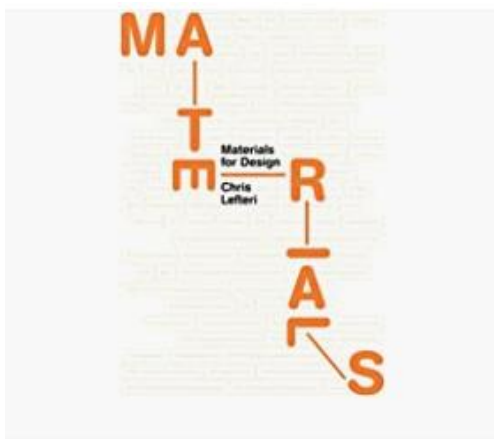
## Wider reading books

Materials for Design Chris Lefteri ISBN978-1-78067-344-8

Making IT Manufacturing Techniques for PD Chris Lefteri ISBN 978-1-85669-749-1

The Pocket Universal Principles of Design: William Lidwell ISBN: 978-1631590405

The Pocket Universal Methods of Design: Hannington & Martin ISBN: 978-1631593741







## Course related textbooks

Full A-Level Textbook – expensive and not directly for our specification but could be a useful resource.



[https://www.amazon.co.uk/AQA-AS-Level-Design-Technology/dp/1510414088/ref=sr\\_1\\_1?crid=2YQHELNJ1Z7CC&dchild=1&keywords=design+and+technology+a+level&qid=15861](https://www.amazon.co.uk/AQA-AS-Level-Design-Technology/dp/1510414088/ref=sr_1_1?crid=2YQHELNJ1Z7CC&dchild=1&keywords=design+and+technology+a+level&qid=15861)

Revision Guide – cheaper than the full textbook but succinct and to the point support



[https://www.amazon.co.uk/My-Revision-Notes-Technology-Product-ebook/dp/B07FCX7SH8/ref=pd\\_sbsd\\_14\\_1/259-9388548-9027630?encoding=UTF8&pd\\_rd\\_i=B07FCX7SH8&pd\\_rd\\_r=8b0058ff-76bd-460f-bbb0-e20bcd53e83b&pd\\_rd\\_w=DsfNU&pd\\_rd\\_wg=0tqKx&pf\\_rd\\_p=6325e962-1fe3-4877-92b0-6ec523db95c5&pf\\_rd\\_r=KQB9A4B2NTV10JSA5NTJ&psc=1&refRID=KQB9A4B2NTV10JSA5NTJ](https://www.amazon.co.uk/My-Revision-Notes-Technology-Product-ebook/dp/B07FCX7SH8/ref=pd_sbsd_14_1/259-9388548-9027630?encoding=UTF8&pd_rd_i=B07FCX7SH8&pd_rd_r=8b0058ff-76bd-460f-bbb0-e20bcd53e83b&pd_rd_w=DsfNU&pd_rd_wg=0tqKx&pf_rd_p=6325e962-1fe3-4877-92b0-6ec523db95c5&pf_rd_r=KQB9A4B2NTV10JSA5NTJ&psc=1&refRID=KQB9A4B2NTV10JSA5NTJ)

Maths for D&T A-Level – support for Maths content



[https://www.amazon.co.uk/Essential-Maths-Skills-Design-Technology/dp/1510417060/ref=sr\\_1\\_4?crid=2YQHELNJ1Z7CC&dchild=1&keywords=design+and+technology+a+level&qid=1586177928&sprefix=design+and+technology+,aps,155&sr=8-4](https://www.amazon.co.uk/Essential-Maths-Skills-Design-Technology/dp/1510417060/ref=sr_1_4?crid=2YQHELNJ1Z7CC&dchild=1&keywords=design+and+technology+a+level&qid=1586177928&sprefix=design+and+technology+,aps,155&sr=8-4)

Purchase is **not** mandatory