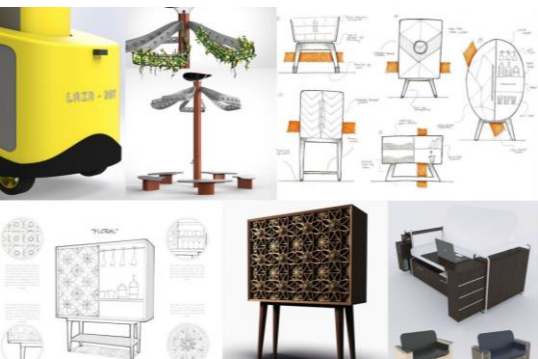
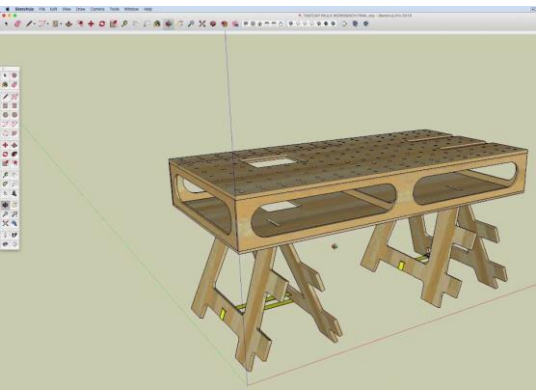


GCSE Art & Design

3D Design

(The alternative DT route)



Making the right choice for you and your future

Are you – A creative, innovative thinker and problem solver?

Are you – Practically minded, crafty and constructive?

Are you – An independent thinker and a self-motivated learner?

Are you – Interested in computer aided design programmes and computer graphics?

Can you – Demonstrate care, develop and refine work for a quality outcome?

Can you – Create interesting and creative visual pages?



Year 9

- **Core skills** – Develop mastery practical workshop skills
- **Graphics** – Refine page presentation skills and key focus on CAD (computer aided design)
- **Innovation in Product Design** – Design and manufacture, independent, electronics project

Year 10

- **Innovation in Product Design** – Design and manufacture, independent, electronics project
- **Portfolio** – Final GCSE ‘design context’ project





Key skills and objectives

- AO1

- Develop ideas through investigations, demonstrating critical understanding of sources.

- AO2

- Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.

- AO3

- Record ideas, observations and insights relevant to intentions as work progresses.

- AO4

- Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.



This course is broken down into 2 assessed components:

a) Portfolio (60%)

120 marks

A design and manufacture portfolio

“A portfolio of practical work showing their personal response to either a centre, or learner-set starting point, brief, scenario or stimulus.”

b) Externally set task (40%)

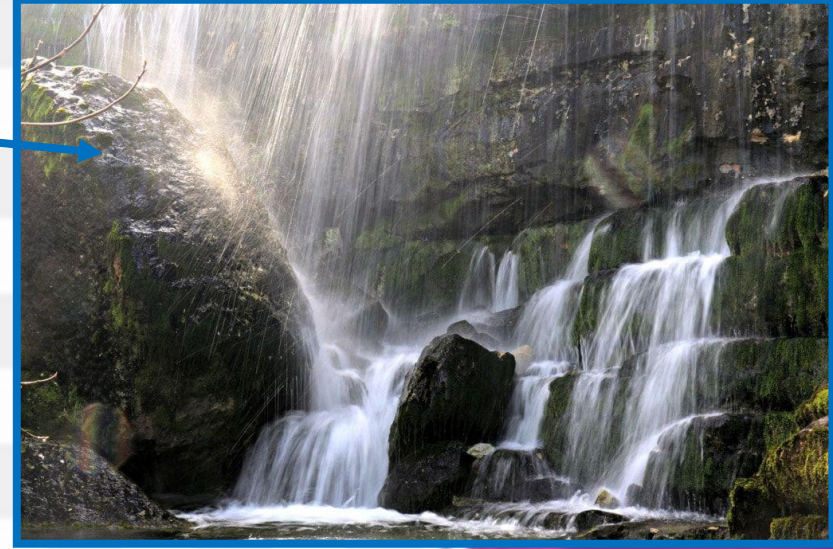
80 marks

10 hour timed practical assessment

“The early release paper will provide learners with five themes, each with a range of written and visual starting points and stimuli. A response should be based on one of these options.”



Products inspired by nature



Here I have trialled adding a carry handle for my speaker. This would assist with portability as it would otherwise not be so easy and comfortable to pick up and carry. It could be laser-cut out of MDF and the edges sanded down, in either a simple arc, or more ergonomic design as shown in the zoom-in section.

Alternatively, I could go with the wider centre, which would make my speaker very robust, however I believe it makes it look too square to fit in with the contemporary design inspiration. For these reasons I am planning on staying with my original design of the centre.

Here I have shown an additional functionality of my speaker by placing the top of the speaker to place the user's phone on to keep the cable tucked away.

Here I have trialled the look of my speaker with rounded corners. I think it would also be a good idea to have rounded corners on the sides.

I have considered adding the functionality of allowing my speaker to be placed vertically on a table. For this I would have to ensure that the heaviest part (the batteries) are placed inside for a low centre of gravity in both positions, to keep it stable. I think this would be useful as it would decrease the amount of desk space taken up, while not compromising on safety.

How can I make the cube shape by sticking the wooden sides together using wood glue?

Light cubes made up of colourless plastic. Lights inside.

Thinner metal to contrast against the natural wood.

The product would be quite large so that it can be a centre piece on a wall. Also, big enough so it can light up an entire room.

translucent plastic with lights underneath

wood will be quite dark so that it contrasts with the bright light.

This design will be table top so therefore, it must be a suitable size that doesn't take up a lot of room but still emits a sustainable amount of light.

thin pieces of metal to support the light bulb.

Light bulb on top of shade instead of at the bottom, like regular lamp shades.

small enough to fit on a table / cabinet top

Translucent panels would be joined together with opaque colour panel (much thinner)

Flat on top so you can put things on top and use it as a shelf on top

Strip, LED tape lighting could run through the plastic triangles as the light source.

triangles are made of colourless plastic, with lights behind them.

cut in a dripping effect

clear plastic with yellowish LED lighting underneath

Acrylic plastic with yellowish LED light so yellow light glow through.

Wooden underneath made up of separate MDF rings stuck together using wood glue. Later, I would sand it so it's smooth and uniform.

table (desk) top

ceiling light

table top light

I would stick lighting tape on the inside of each part of the lampshade. This would give off more light than a filament bulb.

The light tape also means I can put as much on my product as I like as you can cut it to size.

I could use a light bulb as the source of light for my product table or I could use lighting tape.

I would just use a big block of wood as the stand which I would sand into the desired shape and size.

I think this would look good as the natural white wood would contrast nicely with the manufactured lamp shade.

I like the unusual shape of this one however, I think it would be hard to make and also more expensive, compared to other designs.

I could disguise the wire for the light tape in the wooden stand so the product has a stylish and expensive looking finish.

I would use the same type of wood as in the original design for a natural, organic effect.

This design requires less wood and therefore would be cheaper to produce.

Instead of multiple legs to hold up the lamp shade I could use a triangular shaped stand.

All the pieces of wood will be the same thickness and width so it looks equal and professional.

2mm metal wire

Support frame for material shade.

- thin Veneer wood
- thin plastic
- cotton card

Metal wire support needed to support material and keep in correct position. Also it enables the light to be shined.

If I used a...

wooden rings made from lots of small rings of MDF, glued together and then sanded.

To give the MDF a glossy finish (more expensive looking)

wooden rings made from lots of small rings of MDF, glued together and then sanded.

To give the MDF a glossy finish (more expensive looking)



Student outcomes



TV & Radio

Advertising

Fashion

Project
Manager

Developer

Architect

Graphic
Designer

Digital Media

Product
Designer



<https://www.youtube.com/watch?v=KwWJ4Gb3F1k&feature=youtu.be>



<https://vimeo.com/181316077>

What about your future?

