

Design and Technology Transition Work June 2020

Please complete the weekly tasks outlined below and attend the meet sessions with the teachers for further guidance and information.

Please keep all work created in a folder to present to me in the first lesson in September.

Design and Technology: Product design	Google Classroom Code:	Google Meet code:
AQA 7135 7136	ln7mqx2	https://meet.google.com/lookup/cbqvsvdopk
Weekly Tasks	Topic	Resources
W/C 1.6.20 Lesson on Meets Thur 4 th June 2.25 pm Mr Watson	User centred design 1 hour Sketching skills 2 hours	<ul style="list-style-type: none"> • Watch the youtube video 'The Big Life Fix Episode 1' – https://www.youtube.com/watch?v=munVsXsqgSc <p>Make bullet point notes as you watch to record the process that the designers go through to create a solution to the user's problem.</p> <ul style="list-style-type: none"> • What did they actually do? – starts with meeting the client • What stages did they go through? • How did they achieve a working final product? <p>2D sketching skills – looking at form and proportion. Watch the demo on youtube - https://www.youtube.com/watch?v=SYrtS24Q8Hg Carry out this exercise for yourself – notice the careful use of FAINT construction lines and then lining in with thicker lines when the designer is sure the lines are in the right place.</p>
W/C 8.6.20	Sketching skills 2 point perspective 3 hours + as much time as you would like to spend	<p>Recreate the examples shown in these tutorials – use the warm-up before you start. Then watch the tutorial on line weight and apply it to your sheets</p> <p>Simple 2 point perspective box: https://www.youtube.com/watch?v=5BTxOc4rhVk Above and below the horizon https://www.youtube.com/watch?v=gVRhgVawYIA Multiple boxes https://www.youtube.com/watch?v=7fIKwJUji8U Hollow objects https://www.youtube.com/watch?v=7WM3FMRIxFA Line weight https://www.youtube.com/watch?v=0ibAhP28vY4</p> <p>Extension 1:</p> <p>Watch this video on shadows –try applying this to some of your own sketches https://www.youtube.com/watch?v=9KzCpzdXNR0</p> <p>Extension 2: Chose an item of furniture in your house (as complicated/simple as you think you can just about manage – be brave!) Draw it in 2 point perspective using all the skills you have been practising</p>

W/C 15.6.20

Toaster sketch sheet layout
3 hours

Lesson on Meets
Monday 15th
2.25 pm

Sketch this toaster on 1 A3 sheet or 2 sheets of A4. Sketch it using several different views including 2D and 3D – extension: exploded view.

Look at the example sketch sheet below – why does it look so good? Learn from it if you can.

Consider: Use all the skills of construction lines, crating, thick and thin line weighting, as well as different views and layout of the overall sheet.

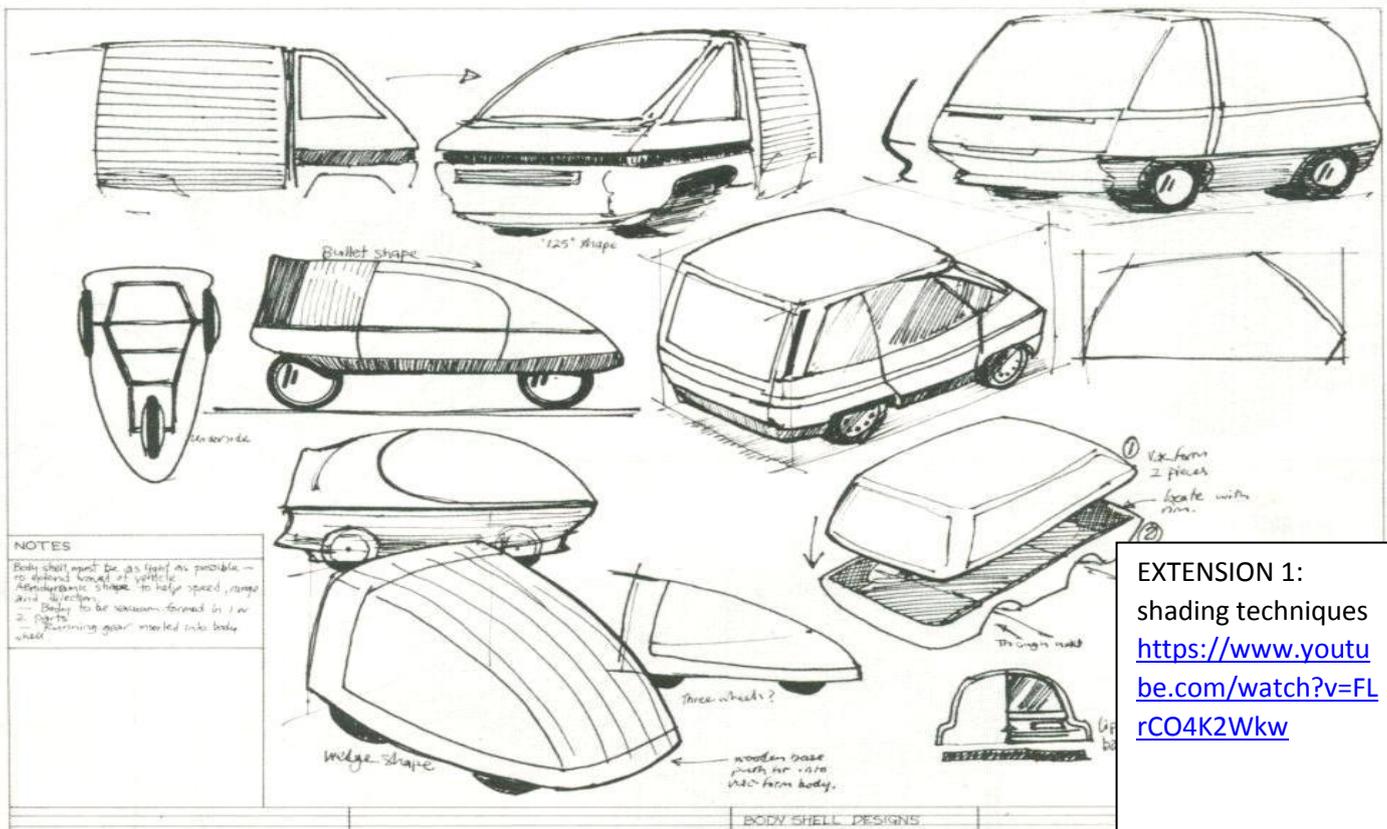
Extension 2: if you have time, add another sketch sheet and try to show how this toaster could be put together – exploded or cut-away views could be used



DE – 2D and 3D sketches used - Understandable and fairly neat, some accuracy shown

BC – 6+ different views shown inc. 2D and 3D. views are mostly accurate but there may be a few errors. There is evidence of different line thicknesses used to good effect.

AA* - Flair shown – 8 or more good views show real experimentation/creativity. Sketches accurately show the shape of the toaster with few errors. Line thickness used well. There may be construction details shown using a exploded or cutaway views



EXTENSION 1:
shading techniques
<https://www.youtube.com/watch?v=FLrCO4K2Wkw>

W/C 22.6.20	<p>Product analysis And Understanding production</p> <p>3 hours</p>	<p>Watch these 2 youtube videos on product analysis and manufacture – listen/watch carefully to see what is considered. Product analysis: https://www.youtube.com/watch?v=4IZ0bnVrgS0</p> <p>how its made: https://www.youtube.com/watch?v=eWcnxmJOpXc</p> <p>Present your own product analysis of a piece of flat-pack furniture using powerpoint or similar computer app. You must include:</p> <ol style="list-style-type: none"> 1. Detailed photos of the product (eg. Bedside table, etc) 2. Label and explain all the design choices made by the designer 3. If possible – take it apart and photo the joints used – ASK PERMISSION FIRST!! 4. Show all construction details and give reasons for the choices of materials and construction fittings – add internet sourced images of the components if you can't take it apart. <p>**FIND a 'how its made' youtube video on flat-pack furniture/ikea furniture as it will show many of the design choices and construction details for you to add to your sheet. Help: use ACCESS FM to help you think of headings to use on your sheet</p>
<p>W/C 29.6.20</p> <p>Lesson on Meets Monday 29th 2.25 pm</p>	<p>CAD: Sketch-up skills</p>	<p>This part of the transition work will be heavily teacher led by Mrs Davies. You must be there for the live streamed lesson with the software ready to go...so try it out before the lesson!</p> <p>To access the cloud based software for free from home: https://www.sketchup.com/products/sketchup-for-schools (You will need to use your google classrooms login details for this)</p> <p>Aim: To develop knowledge and understanding of the majority of SketchUp tools including dimensions and scale. To enable you to visualise and present your ideas realistically using CAD software.</p> <ol style="list-style-type: none"> 1. Task one: Camera 2. Task two: Independent product of choice <p>Both products will be rendered in 3D as well as exported as orthographic drawings with correct dimensions. A variety of tutorials will be referred to from the SketchUp YouTube Channel: https://www.youtube.com/user/SketchUpVideo/ You should explore these in your own time to familiarise yourself with how to use it.</p>
W/C 6.7.20	<p>Nesting box design</p> <p>This product was chosen to allow you to be creative, but on a shape that is</p>	<p>Your task is to design a unique nesting box to encourage small birds – specifically blue tits - into a modern city garden. It must have a sloping roof that allows rain to run off and be able to be opened for cleaning between seasons.</p> <p>Watch this video – to introduce the task and how you might want to start your design task https://www.youtube.com/watch?v=Ci7IhzRVV4E</p> <ol style="list-style-type: none"> 1. Briefly research the sizes/requirements needed for the nesting box for a blue tit. (10 minutes)

	<p>relatively simple to draw and is not too complex to show construction details</p> <p>3 hours + whatever extra time you would enjoy spending on this</p>	<ol style="list-style-type: none"> 2. Create a wide range of initial ideas starting in 2D then working in 3D to visualise your preferred ideas. You could stick to the pitched roof in the video – or use your own design. (1.5 hours) 3. Develop construction details and overall shape until you have a final design you really like. Remember to show how it will open (1 hour) 4. Sketch your final design including sizes (20 minutes) <p>Extension: you could make this final sketch into a high quality final drawing using colour etc. You could draw an orthographic drawing as well if you like</p> <p>This is another video by a professional designer about sketching and initial idea development:</p> <p>sandwich box design example https://www.youtube.com/watch?v=uczA166cNEk</p>
W/C 13.7.20	Nesting box sketch-up presentation	<p>Draw your nesting box final design on sketch-up.</p> <ol style="list-style-type: none"> 1. Draw the correct shape – to the correct size if you can 2. Apply appropriate colours and materials to your design 3. Print screen or export a range of useful views to show off your design – remember one view needs to be looking up at it as this is the way it will be seen when in use. 4. Present these images on a single powerpoint slide to sell your design concept to a potential client. Add any text that you think a potential manufacturer/client might need/want to know
Fortnightly Meet: Date & Time		
Thur 4 th June 2020 2.25 pm	Intro and sketching skills Mr Watson	You will need plain paper (A4 or A3) and a pen/biro
Monday 15 th June 2.25 pm	Sketching skills, page layout and product analysis Mr Watson	You will need plain paper (A4 or A3) and a pen/biro as well as the work you have done so far.
Monday 29 th June 2.25 pm	Sketch-up skills Mrs Davies	<p>You need to have got sketch-up working before the lesson.</p> <p>To access the cloud based software for free from home: https://www.sketchup.com/products/sketchup-for-schools (You will need to use your google classrooms login details for this)</p>

General resources and suggested reading:

Many links in the work above will connect to other excellent resources for extra study

Specification Link:

AQA web page for A level D&T: Product Design

<https://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552>

Specification

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

Text book – no requirement to buy:

AQA design and technology product design by Ian Granger, Will Potts, Julia Morrison and Dave Sumpner Hodder Education

https://www.amazon.co.uk/AQA-AS-Level-Design-Technology/dp/1510414088/ref=pd_lpo_14_img_0/258-2989511-7314623?encoding=UTF8&pd_rd_i=1510414088&pd_rd_r=f946fdc8-0747-4499-82bd-8ede303f4a02&pd_rd_w=k47St&pd_rd_wg=G9Ra9&pf_rd_p=7b8e3b03-1439-4489-abd4-4a138cf4eca6&pf_rd_r=TXVFDTVFWHQGGESP5JOR&psc=1&refRID=TXVFDTVFWHQGGESP5JOR

Documentaries to watch (youtube)

Dragon's den

The Big Life Fix series

Better by design