



Specification: AQA Product Design Specification:

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

*Of the books/activities listed below, you need to choose **at least one blue task, and 2 green tasks**.*

Immediately after each of these (before you forget), you should complete the Sixth Form Induction Tasks Worksheet.

Reading Books: For each of the reading tasks picked read and enjoy the book! Then make some simple notes of the key points and interesting elements you have learnt so you can share this with us when you return.

- **James Dyson - Against the Odds: An Autobiography**
Dyson's freewheeling account of his struggles, failures and successes is interspersed with his unorthodox ideas on business, and his hard-won insights on how to turn an inspired idea into a household name. An excellent start to learning about how to truly design in the real work and the processes you should go through.
- **Chris Anderson - Makers: The New Industrial Revolution.**
Chris Anderson explains how this is happening: how such technologies as 3D printing and electronics assembly are becoming available to everybody, and how people are building successful businesses as a result. Whereas once every aspiring entrepreneur needed the support of a major manufacturer, now anybody with a smart idea and a little expertise can make their ideas a reality.
- **Peter Dabbs – Product Design Styling**
In this, the first product design book devoted purely to styling, Peter Dabbs helps students and professionals to understand how to style their own consumer-focused products. Providing a clear and simple breakdown of the stages in the styling process, Product Design Styling is packed with:
 - Annotated illustrations
 - Photographs of industry examples
 - Modified images showing proportions, silhouettes and lines.
- **Don Norman – The Design of Everyday things.**
This shows us that good, usable design is possible. The rules are simple: make things visible, exploit natural relationships that couple function and control, and make intelligent use of constraints. The goal: guide the user effortlessly to the right action on the right control at the right time.
- **Bjarki Hallgrímsson – Prototyping and modelmaking for Product Design**
Building prototypes and models is an essential component of any design activity. Modern product development is a multi-disciplinary effort that relies on prototyping in order to explore new ideas and test them sufficiently before they become actual products.

Prototyping and Modelmaking for Product Designers illustrates how prototypes are used to help designers understand problems better, explore more imaginative solutions, investigate human interaction more fully and test functionality so as to de-risk the design process.



- **Chris Lefteri – Making it: Manufacturing techniques for product design. 2nd Edition.**
There are many different ways in which a product can be manufactured, but most designers probably know only a handful of techniques in any detail. Using contemporary design as a vehicle to describe production processes, this book covers a broad range of production methods with descriptive text, specially commissioned diagrams, product shots, and photographs of the manufacturing process.
- **Adrian Newey – How to build a Car.**
How to Build a Car explores the story of Adrian's unrivalled 35-year career in Formula One through the prism of the cars he has designed, the drivers he has worked alongside and the races in which he's been involved. A true engineering genius, even in adolescence Adrian's thoughts naturally emerged in shape and form – he began sketching his own car designs at the age of 12 and took a welding course in his school summer holidays. From his early career in IndyCar racing and on to his unparalleled success in Formula One, we learn in comprehensive, engaging and highly entertaining detail how a car actually works.

Activities

- **Join our DT twitter site and create your own. <https://twitter.com/ChallonerDT>**
Twitter is a great resource to read/find contemporary issues about design in the real work. By joining you can tweet your own stories you find interesting and also see what we at Challoner think are relevant and interesting.
- **Create an Instagram account just for design images - <https://www.instagram.com>**
Aim to take an image a day in the holiday based on images that inspire you. This will provide a basis for inspiration for when you design. Try to make your images inspiring; consider your content and have fun with it!
- **Join Pinterest and start to pin work that interests you. <https://uk.pinterest.com/>**
People use Pinterest to discover and save ideas. Ideas can take lots of forms, from recipes to renovation projects to the perfect pair of shoes. Every idea is represented by a "Pin" that includes an image, a description and a link back to the image's source online. When people click a Pin's URL they can find out more about the idea and act on it. In addition follow our Challoner Pinterest sight: <https://uk.pinterest.com/RCTechnology/>
- **Create a sketch book.**
Create a sketch book – any little book. Collect images, articles, pictures, sketch, paint etc. This can be something you can use for ideas or just a doodling area where you practise your sketches. Some quote that may inspire you – "Good ideas can come at any time, so always have a pencil to hand". "How pretty a sketch looks aren't important. It's all about communicating ideas to those around you".



- **Practise sketching**

Practice sketching in a number of mediums i.e. pencil, coloured pencil, pen, fine line etc. Focus on practicing quick 3D sketches, show tone and materials using line/colour and draw from different viewpoints. *You could do this in your sketch book (above).*

- **Who inspires me?**

Find out about contemporary people/pieces in design/engineering and put together a **small project** or even just a **sketch book** of the work that reflects your passion/interests. For example, if you already know that you want to become an architect perhaps you may just want to focus on this area. This could take shape in any form.

- **Watch a good a range manufacturing and product design related videos – you tube**

Watch any videos especially around manufacturing processes and product design and create your own library to refer back to on the course. **Make a note of the URL, watch them and make some notes of the key points and interesting elements.**

- **Watch some TV – mindfully!**

Watch design programmes on TV and actually watch it with a “designer’s” focus – make notes or sketches when you watch it. George Clarke’s Amazing Spaces can be watched on 4oD for free and provides some inspiring ideas/concepts. Other programmes include:

- Grand Designs
- The Repair Shop
- Gadget Man
- Big with Richard Hammond

You can find lots more related programmes on you tube – just look! **watch this and make some notes of the key points and interesting elements.**

- **Visit the Design Museum in London - <https://designmuseum.org/>**

The Design Museum in Kensington, London, England, exhibits product, industrial, graphic, fashion, and architectural design. It is **free** to go in, however you may have to pay for extra for some short-term exhibits.

Other extra suggestions:

- Visit other museums that might have DT related content i.e. V&A Museum, Tate Museums.
- Be aware of DT related new articles and information in the media. Save them and share them with us after the holidays.
- Practice CAD/CAM skills at home with the package Shaper 3D. You will need to sign up for a free student account and if you do this on a iPad you will need a apple pencil.