

Research shows that the most successful students (i.e. those that make the most progress and get the highest grades) are doing between 20 and 25 hours of independent study per week by the **middle** of Year 13. That may seem a lot, but it's something that you would build up to over the course of your A-Levels. In Year 12, we're talking something more like 15 hours per week. This equates to roughly 5 hours of independent study per A-Level per subject.

Remember that your independent study is divided into three types;

- Consolidation
- Reactive
- Proactive.

## Consolidation – Theory Lesson

The evening following a Product Design Theory lesson, you should spend 15 minutes rereading your notes, making relevant flashcards of the topic or processes studied e.g. Labelled diagrams of processes, mind maps.

Every worksheet has space for notes & **past paper questions** which you must complete if not possible in the lesson due to time restrictions.

You can check the content of the lesson or refresh points covered by referring to the 365 page developed for your course as all videos / PowerPoints / worksheets & further reading are included here;

<https://becbd.sharepoint.com/BecLearners/Technology/Phase%203%20Resistant%20Materials/SitePages/Home.aspx>

## Consolidation – Coursework Lesson

Following your coursework lesson, you will have a better idea of the direction of your project. It is crucial that you record notes from discussions you have with your teacher and map out the work you are going to complete before the next lesson. (10 mins)

## Reactive

This will depend on where in the course you are. If in the early stages of the course this could be;

- **Further research** into your coursework – **Materials research, Existing products, Client interview.**
- **Designing** – Initial design ideas created (with **annotation**) & recorded in your design folder.
- **Design Development** – **Further investigations, modification of design ideas.** (Again, record ideas in your design folder, annotating any / all images.)
- **Manufacture Specification** – **Orthographic drawings** of final design proposal, **cutting list, flow chart** for manufacture (enough information for a third party to make your product).
- **Evaluations** – Final evaluation **against specification.** Final **client interview** / evaluation. Evaluation should be present on every page throughout your folder. How the work on the folder will influence further direction / thinking / designs.

This may take **30 minutes to 2 hours per week**, but if you do not complete this over the duration of the course (Year 12 & 13) you will **never** make up the time if you leave it right till the end of the course in Year 13.

## Proactive

This is the section that will broaden and deepen your overall understanding of the subject you are studying. It will not necessarily involve work that has been set by your teacher, but instead it is about you attempting the extra practice questions, reading articles, watching videos, TED talks etc.

This might contain some of the following:

- o Register with 'Design Week' and 'Creative Review' and read some of the recent articles you find interesting.  
<https://www.designweek.co.uk/>  
<https://www.creativereview.co.uk/>
- o Complete a set of practice past paper questions – available at the bottom of the 365 Product Design page or on the AQA website (**1 hour**)
- o Use websites to complete and add to class notes (**30 minutes**)
- o Practice further exam questions from the worksheets (**30 mins**)
- o "Read, Cover, Write and Check" sections of worksheets / topics / processes covered (**20 mins**)
- o Watch a TED talk on a 3D printing or future product design topics (**20 mins**)
- o Carry out a quick product analysis of a product. (**20 mins**)
- o Watch some 'How it's Made' videos (**10 mins**)

## Useful links

365 –

<https://becbd.sharepoint.com/BecLearners/Technology/Phase%203%20Resistant%20Materials/SitePages/Home.aspx>

AQA Past papers <https://www.aqa.org.uk/find-past-papers-and-mark-schemes>

Technology Student – <http://www.technologystudent.com/>

TED Talks <https://www.ted.com/talks?sort=relevance&topics%5B%5D=Technology&q=Design>

Edexcel Past Papers –

[https://qualifications.pearson.com/en/support/support-topics/exams/past-papers.html?Qualification-Family=A-Level&Qualification-Subject=Design%20and%20Technology%20-%20Product%20Design%20\(2017\)&Status=Pearson-UK:Status%2FLive&Specification-Code=Pearson-UK:Specification-Code%2Fal17-designtech-proddesign](https://qualifications.pearson.com/en/support/support-topics/exams/past-papers.html?Qualification-Family=A-Level&Qualification-Subject=Design%20and%20Technology%20-%20Product%20Design%20(2017)&Status=Pearson-UK:Status%2FLive&Specification-Code=Pearson-UK:Specification-Code%2Fal17-designtech-proddesign)

WJEC Past Papers – <https://www.wjec.co.uk/qualifications/qualification-resources.html?pastpaper=true&subject=DesignandTechnology&level=gceasa>

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

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

# 5 hours in... Product Design

– your weekly review

Week beginning: \_\_\_\_\_

What have I been learning? \_\_\_\_\_

| Consolidation (tick when complete) |  | Reactive 1 | Reactive 2 | Proactive 1 | Proactive 2 | Proactive 3 |
|------------------------------------|--|------------|------------|-------------|-------------|-------------|
| Lesson 1                           |  |            |            |             |             |             |
| Lesson 2                           |  |            |            |             |             |             |
| Lesson 3                           |  |            |            |             |             |             |
| Lesson 4                           |  |            |            |             |             |             |
| Time spent                         |  |            |            |             |             |             |

Total time spent on Independent Learning in Product Design this week: \_\_\_\_\_

Areas of theory that require further review & knowledge embedded.

Support required for further progress in coursework.

Checked by: \_\_\_\_\_ (teacher)

# 5 hours in... Product Design

– your weekly review

Week beginning: 16/09/2019

What have I been learning in THEORY lessons?

Lesson 2 – Ferrous / Non-Ferrous Metals & Alloys

| Consolidation (tick when complete) |        | Reactive 1   | Reactive 2  | Proactive 1  | Proactive 2   | Proactive 3                         |
|------------------------------------|--------|--|---|--|---|-------------------------------------|
| Lesson 1                           | ✓      | Improve notes on topic, answer the past paper question & create a flash cards on the topic. Watch the pod cast linked to the 365 sheet & add notes from this to lessons notes to improve the sheet | Document the progress you made on your coursework. Improve annotation on designs and further develop a range of feasible ideas. | Use 'Technology Student' to embellish flash cards / notes. | Watch a 'How it's Made' YouTube video on a suitable product. Identify the key words used in the video of the vocabulary you should be learning to incorporate into your work. | Read an article from 'Design Week'. |
| Lesson 2                           | ✓      |  |   |  |   |                                     |
| Lesson 3                           | ✓      |  |   |  |   |                                     |
| Lesson 4                           | ✓      |  |   |  |   |                                     |
| Time spent                         | 1 hour | 40 minutes   | 1hour   | 20 minutes   | 20 minutes  | 20 minutes                          |

Total time spent on Independent Learning in Product Design this week: 3 1/2 hours

Areas of theory that require further review & knowledge embedded.

**WHAT** – Know a range of different metals under each category.

**WHY** – Ensure definitions are fully understood & remembered.

**WHERE** – Have a bank of examples of where all metals are used.

Support required for further progress in coursework.

**WHAT** further guidance do you require. – Existing products / manufacture / experimentation / further investigations.

**WHY** will this be necessary for the future path of the project.

**WHERE** might these actions have a positive impact on the project.

Checked by: \_\_\_\_\_ (teacher)