

GCSE Product Design 2022-2023

Year 10

| Lesson | Cycle No.      |                                                               | Homework (weekly exam questions will also be set) | Notes                  |  |
|--------|----------------|---------------------------------------------------------------|---------------------------------------------------|------------------------|--|
| 1      | 1 WC 5th Sept  | Introduction to Project - Ergonomics                          | HWK1- Hardwoods and Softwoods                     |                        |  |
| 2      |                | 3D Drawing Techniques Booklet                                 |                                                   |                        |  |
| 3      |                | 3D Drawing Techniques - Drawing Board                         |                                                   |                        |  |
| 4      |                | Sources and Origins of Timber, Environmental Impact of Timber |                                                   | HWK 1A - 3D Drawing    |  |
| 5      |                | Life Cycle of Timber                                          |                                                   |                        |  |
| 6      | 2 WC 19th Sept | Seasoning & Physical Characteristics of Timber                | HWK 2 Woods Research                              |                        |  |
| 7      |                | Stock Forms, Types and Sizes                                  |                                                   |                        |  |
| 8      |                | Maths and Types of Joint                                      |                                                   |                        |  |
| 9      |                | Types of Joint                                                |                                                   |                        |  |
| 10     |                | Practical - Joints Box                                        |                                                   |                        |  |
| 11     | 3 WC 3rd Oct   | Practical - Joints Box                                        | HWK 5 - Area of a Square                          |                        |  |
| 12     |                | Practical - Joints Box                                        |                                                   |                        |  |
| 13     |                | Practical - Joints Box                                        |                                                   |                        |  |
| 14     |                | Practical - Joints Box                                        |                                                   |                        |  |
| 15     |                | HWK Review - Area of Square<br>Buffer Lesson                  |                                                   |                        |  |
| 16     | 4 WC 17th Oct  | Practical - Joints Box                                        | HWK 6 Area of a Rectangle                         |                        |  |
| 17     |                | Cutting lists                                                 |                                                   |                        |  |
| 18     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 19     |                | Practical - J Box Make                                        |                                                   | HWK 7 Volume of a cube |  |
| 20     |                | HWK Review - Area of Rectangle<br>Practical - J Box Make      |                                                   |                        |  |
| 21     | 5 WC 7th Nov   | Practical - J Box Make                                        | HWK 8 Volume of a Prism                           |                        |  |
| 22     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 23     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 24     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 25     |                | HWK Review - Volume of Prism<br>Practical - J Box Make        |                                                   |                        |  |
| 26     | 6 WC 21st Nov  | Finishes of Timber and Assembly Fixtures                      | HWK 3 - Adhesives                                 |                        |  |
| 27     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 28     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 29     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 30     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 21     | 7 WC 5th Dec   | Practical - J Box Make                                        | HWK 10 - Natural Timbers and Maths                |                        |  |
| 22     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 23     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 24     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 25     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 26     | 8 WC 2nd Jan   | Practical - J Box Make                                        | HWK 4 - Quality Control                           |                        |  |
| 27     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 28     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 29     |                | Quality Control                                               |                                                   |                        |  |
| 30     |                | Quality Control                                               |                                                   |                        |  |
| 31     | 9 WC 16th Jan  | Final Design Assessment                                       | HWK 9 Final Design Drawing                        |                        |  |
| 32     |                | Final Design Assessment                                       |                                                   |                        |  |
| 33     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 34     |                | Practical - J Box Make                                        |                                                   | HWK Revision           |  |
| 35     |                | Practical - J Box Make                                        |                                                   |                        |  |
| 36     | 10 WC 30th Jan | Evaluation of Project                                         |                                                   |                        |  |
| 37     |                | Revision of topic                                             |                                                   |                        |  |
| 38     |                | Exam                                                          |                                                   |                        |  |
| 39     |                | Exam Marking                                                  |                                                   |                        |  |

|    |                  |                                                                                                   |                                                         |  |  |
|----|------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------|--|--|
| 40 |                  | End of Module Organisation - Fill out Assessment sheets, reflect on areas to improve, set targets |                                                         |  |  |
| 41 | 11 WC 20th Feb   | Phone Holder Project - Introduction to New Project, Design Brief and Specification                |                                                         |  |  |
| 42 |                  |                                                                                                   |                                                         |  |  |
| 43 |                  |                                                                                                   |                                                         |  |  |
| 44 |                  | Design Brief (P3) and Inspiration (P4,P5)                                                         |                                                         |  |  |
| 45 |                  | METALS (P24,25,26)                                                                                | HWK 1 & HWK 2 - METALS THE BASICS AND ALLOYS THE BASICS |  |  |
|    |                  | Model and Initial Ideas (P6)                                                                      |                                                         |  |  |
| 46 | 12 WC 6th Mar    | Metals Review (P27, 28)                                                                           | HWK 1 A - FINAL DESIGN WITH EXPLODED VIEW               |  |  |
| 47 |                  | Exploded views (P7, 8)                                                                            |                                                         |  |  |
| 48 |                  | Finite resources & Generation of Power (P12, 15, 16,17, 18)                                       |                                                         |  |  |
| 49 |                  | Modelling and Testing (P10)                                                                       |                                                         |  |  |
| 50 |                  | Final Design Assessment (P11)                                                                     | Final Design Assessment (P11)                           |  |  |
| 51 | 13 WC 20th Mar   | Generation of Power Exam Prep (P19,20) Life Cycle Analysis (P13,14)                               | LIFE CYCLE ANALYSIS / ECOLOGICAL FOOTPRINT              |  |  |
| 52 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 53 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 54 |                  | Scale of Production (P21,22,23)                                                                   | Aesthetic, Properties and Sources of Metals             |  |  |
| 55 |                  |                                                                                                   |                                                         |  |  |
| 56 | 14 WC 17th April | Forces, Stresses ( P29) Plastic The Basics (P30)                                                  | Practice Exam Questions - Task 1                        |  |  |
| 57 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 58 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 59 |                  |                                                                                                   |                                                         |  |  |
| 60 |                  | Plastics the Basics (P31)<br>Practical - Phone Holder Make                                        | Poly mer Products and Polymer Properties                |  |  |
| 61 | 15 WC 1st May    | Practical - Phone Holder Make                                                                     | Practice Exam Questions - Task 1 (plastics)             |  |  |
| 62 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 63 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 64 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 65 |                  | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 66 | 16 WC 15th May   | Practical - Phone Holder Make                                                                     |                                                         |  |  |
| 67 |                  | Evaluation of Project                                                                             |                                                         |  |  |
| 68 |                  | Exam                                                                                              |                                                         |  |  |
| 69 |                  | Exam Marking                                                                                      |                                                         |  |  |
| 70 |                  | End of Module Organisation - Fill out Assessment sheets, reflect on areas to improve, set targets |                                                         |  |  |
| 71 | 17 WC 5th June   | <b>COURSEWORK START</b> Section 1 - Design Brief                                                  | COMPLETE DESIGN BRIEF                                   |  |  |
| 72 |                  | Section 1 - Design Brief                                                                          |                                                         |  |  |
| 73 |                  | Section 1 - Product Analysis                                                                      |                                                         |  |  |
| 74 |                  | Section 1 - Product Analysis                                                                      | COMPLETE PRODUCT ANALYSIS                               |  |  |
| 75 |                  | Section 1 - Product Analysis                                                                      |                                                         |  |  |
| 76 | 18 WC 19th June  | Section 1 - Anthropometrics + Environment                                                         | COMPLETE Anthropometrics                                |  |  |
| 77 |                  | Section 1 - Anthropometrics + Environment                                                         |                                                         |  |  |
| 78 |                  | Section 1 - Anthropometrics + Environment                                                         |                                                         |  |  |
| 79 |                  | Section 1 - Product Deconstruction                                                                | COMPLETE PRODUCT ANALYSIS                               |  |  |
| 80 |                  | Section 1 - Product Deconstruction                                                                |                                                         |  |  |
| 81 | 19 WC 3rd July   | Section 1 - Product Deconstruction                                                                | COMPLETE PRODUCT DECONSTRUCTION                         |  |  |
| 82 |                  | Section 1 - Research Summary                                                                      |                                                         |  |  |
| 83 |                  | Section 1 - Specification                                                                         |                                                         |  |  |
| 84 |                  | Section 1 - Specification                                                                         | COMPLETE RESEARCH SUMMARY                               |  |  |
| 85 |                  | Section 1 - Specification                                                                         |                                                         |  |  |