## **Year 11 Technology Autumn PPE 1 REVISION**

#### **SECTION A**

Multiple choice and 2-4 mark questions

General revision: Co-operatives, crowdfunding, renewable energy, designing for maintenance, biodegradable materials, paper and board, materials, mechanisms, global warming,

#### **SECTION B – Specialist technical principles**

2-6 mark questions whilst also combining knowledge of materials – be sure to pick the correct product or material when choices have to be made.

### Revision Plan – use with topic list

| TASK | Topic Area                             | Video Link   | Activity   | Pages in<br>CGP<br>revision<br>guide |
|------|--|--|--|--------------------------------------|
| 1    | Forces                                 | Technology student link  Different Types of Forces (technologystudent.com)   | Are you able to identify forces acting on an object? Tension Compression Shear Bending Torsion  NOT Gravity                                      | 38-39                                |
| 2    | Additive<br>Processes                  | BBC Bitesize link Joining materials and components - Systems: Manufacturing techniques - Eduqas - GCSE Design and Technology Revision - Eduqas - BBC Bitesize  Technology student link PRINTING AND ASSOCIATED PROCESSES (technologystudent.com) | Can you describe what an additive process is? Two good examples are printing, 3D printing and soldering  | 57,58<br>97                          |
| 3    | Quality Control                        | Technology student link Quality Control (technologystudent.com)  | What is Quality Control?  If a material has a tolerance on a size. What does this mean?  Can you describe three different quality control tests? | 42,43                                |
| 4    | Stock Forms<br>Sources of<br>materials | BBC bitesize link Stock forms, types and sizes - Timber-based materials - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize  Sources of materials PP PowerPoint Presentation (technologystudent.com)                                | Why are stock forms important when designing?  | 52                                   |

# SECTION C – Designing and making principles

Drawing tasks, extended answer questions and mathematical questions

| 5 | Analyse          | Youtube clip                          | Analyse: Separate information into           | 111     |
|---|------------------|---------------------------------------|--|---------|
|   | & Evaluate       | GCSE D&T exam walkthrough -           | components to identify their characteristics |         |
|   |                  | <u>Design question. (youtube.com)</u> | Evaluate:                                    |         |
|   |                  |                                       | Judge from available evidence                |         |
|   |                  |                                       |  |         |
|   | Isometric        | Technology student link (will         | You need to be confident at finishing off a  | 115-118 |
|   | drawing          | also take you to youtube)             | drawing in isometric or drawing an isometric |         |
|   |                  | ISOMETRIC DRAWING                     | drawing from a third angle view              |         |
|   |                  | (technologystudent.com)               |  |         |
| 6 | Surface finishes | Technology student link               | Understand the different reasons why         | 76,77   |
|   |                  | FINISHES - WOODS, METALS              | surface finishes are required whilst also    |         |
|   |                  | AND PLASTICS                          | being able to list different finishes for    |         |
|   |                  | (technologystudent.com)               | different materials                          |         |
|   | Third Angle      | BBC Bitesize link                     | You have to be able to draw in plan, front   | 115-118 |
|   | _                |                                       | •  | 112-110 |
|   | drawing          | Working drawings - Designing -        | and end views to break apart a complex 3     |         |
|   |                  | AQA - GCSE Design and                 | dimensional shape                            |         |
|   |                  | <u>Technology Revision - AQA -</u>    |  |         |
|   |                  | BBC Bitesize                          |  |         |