**TED Year 7**

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| **Subject** | **TED** |
| Title | *Trinket Box* |
| Success Criteria | ***KPI 1: Knowledge and Understanding*** |
|  | T1: To be able to name and describe at least 3 types of wood. |
|  | T2: To be able to describe and explain comb joints, band facing and sawing techniques. |
|  | T6: To be able to identify risks, hazards and precautions associated with woodwork. |
|  | ***KPI 2: Practical Ability*** |
|  | S1: To be able to clearly communicate ideas through isometric and orthographic technical drawing. |
|  | S3: To independently and successfully use a bench hook, Tenon saw, band facer, sand paper and tri square. |
|  | S8: To accurately measure, mark and cut x10 170mm and x10 150mm pieces of pine and construct comb joints effectively. |
| **Subject** | **TED** |
| Title | *Pendant Casting* |
| Success Criteria | ***KPI 1: Knowledge and Understanding*** |
|  | T1: To be able to name and describe at least 3 types of metals. |
|  | T2: To be able to describe and explain the metal casting process. |
|  | T8: To be able to evaluate and identify strengths and weaknesses of their own work. |
|  | ***KPI 2: Practical Ability*** |
|  | S5: To be able to, with teacher support, successfully cast a pewter shape into a personalised mould. |
|  | S7: To understand and use the correct PPE when casting. To be able to identify risks, hazards and precautions when sanding. |
|  | S9: To be able to effectively implement quality control checks to both practical and design tasks in order to improve outcomes. |
| **Subject** | **TED** |
| Title | *Graphics* |
| Success Criteria | ***KPI 1: Knowledge and Understanding*** |
|  | T8: To be able to evaluate and identify strengths and weaknesses of their own work. |
|  | ***KPI 2: Practical Ability*** |
|  | S1: To be able to clearly communicate ideas through isometric drawing, rendering, freehand sketching, orthographic drawing perspective drawing and exploded diagrams. |
|  | S8: To create technical drawings with precise measurements and interpret measurements between 2D and 3D drawings. |
| **Subject** | **TED** |
| Title | *Night Light* |
| Success Criteria | ***KPI 1: Knowledge and Understanding*** |
|  | T3: To successfully analyse more than 1 existing product using the ACCESSFM framework. |
|  | T4: To write a design brief and a 4 specification that clearly communicates the aim of the project and the criteria which the project must follow. |
|  | T5: To be able to explain the 4 Rs model of sustainability. |
|  | T7: To be able to identify a battery, switch, resistor and LED from circuit symbols and know their functions. |
|  | ***KPI 2: Practical Ability*** |
|  | S5: To be able to safely and neatly solder components to create a working circuit. |
|  | S7: To solder safely by following all health and safely precautions and knowing what PPE to use. |

**TED Year 7**

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| **Subject** | **TED** |
| Title | *Solidworks* |
| Success Criteria | ***KPI 1: Knowledge and Understanding*** |
|  | T2: To be able to identify a range of CAD and CAM methods and describe some advantages and disadvantages. |
|  | ***KPI 2: Practical Ability*** |
|  | S6: To create a basic 3D Solidworks model and export it into an accurate 2D technical Orthographic drawing. |
|  | S9: To independently navigate the solidworks tools and independently problem solve technical difficulties. To be able to support other students. |