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| **S1 Broad General Education Plan – Breadth, Depth, Challenge and Skills** | | | | | | | | | |
| August-October | | | October - December | | | January - April | | April - June | |
| **Learning and Teaching Focus: (Es and Os)**  **Introduction to Health and Safety**  Learning how to safely work in a workshop.  How to use tools and machines correctly. | **Learning and Teaching Focus (Es and Os)**  **Woodwork – Making a simple Desk Tidy**  Making a desk tidy out of Pine wood or MDF.  Learning how to mark out wood and how to safely cut the shape out, using all woodwork machines and tools.  How to apply a finish to your work.  Adding extra design using laser cutter | **Learning and Teaching Focus (Es and Os)**  **Graphic Communication.**  Learning about different types of 2d and 3d drawing views  Boards - Orthographic/Sketching – 2D sketching/Colour Theory. | **Learning and Teaching Focus (Es and Os)**  **Introduction to Plastics – Making an Ice Scraper**  Learning how to work with plastic safely. The different tools we use to cut, shape and finish the edges. Using templates to aid marking out  How to apply a bend to plastic.  Adding extra design using laser cutter | **Learning and Teaching Focus (Es and Os)**  **Graphic Communication.**  Learning about different types of sketching.  Prepare a design to be cut on Ice Scrapper using digital software. | **Learning and Teaching Focus (Es and Os)**  **Introduction to Metalwork – Making a Trowel**  Learning how to work with metal safely. The different tools we use in metalwork compared to woodwork.  How to apply a high finish to your metal using dip coating. | | **Learning and Teaching Focus (Es and Os)**  **Desktop publishing**  DTP software to create a promotional poster. | **Learning and Teaching Focus (Es and Os)**  **Woodwork – Toy Car**  Making a model toy car out of Pine wood.  Learning how to mark out wood and how to safely cut the shape out, using all woodwork machines and tools.  How to apply a finish to your work. | **Learning and Teaching Focus (Es and Os)**  **Computer aided design. 3D modelling using Autodesk Inventor**  Learning skills in how to 2D sketch, dimension, extrude for simple parts. Learning how to assemble multiple parts together and create production drawings. |
| **Assessment Approach and evidence gathered:**  Risk Assessment to be completed to highlight potential workshop dangers.  Complete a safety poster to be introduced into sketching and safety rules. | **Assessment Approach and evidence gathered:**  Practical Model will be completed and then graded. Input from teacher and pupil on good points, what you have learned and how you could improve for next time.  Teacher observations of how you work and how safely you work will count towards your grade.  Photographic evidence will be taken of model. | **Assessment Approach and evidence gathered:**  Portfolio – this is sheets of work where all your different types of drawing will be completed. | **Assessment Approach and evidence gathered:**  Practical Model will be completed and then graded. Input from teacher and pupil on good points, what you have learned and how you could improve for next time.  Teacher observations of how you work and how safely you work will count towards your grade.  Photographic evidence will be taken of model. | **Assessment Approach and evidence gathered:**  Portfolio – this is sheets of work where all your different types of drawing will be completed. | **Assessment Approach and evidence gathered:**  Practical Model will be completed and then graded. Input from teacher and pupil on good points, what you have learned and how you could improve for next time.  Teacher observations of how you work and how safely you work will count towards your grade.  Photographic evidence will be taken of model. | | **Assessment Approach and evidence gathered:**  Poster of final design | **Assessment Approach and evidence gathered:**  Practical Model will be completed and then graded. Input from teacher and pupil on good points, what you have learned and how you could improve for next time.  Teacher observations of how you work and how safely you work will count towards your grade.  Photographic evidence will be taken of model. | **Assessment Approach and evidence gathered:**  CAD drawing test. |
| **Key Skills: Literacy/Numeracy/ HB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Following instructions.  Numeracy: Measuring and marking to stated tolerance. | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Numeracy: Measuring and marking to stated tolerance. | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Following instructions  CAD design skills  Digital literacy – Using Inventor 3D modelling programme. Improving computer skills.  Literacy, Numeracy, Digital Literacy | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Numeracy: Measuring and marking to stated tolerance. | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Following instructions  CAD design skills  Digital literacy – Using Inventor 3D modelling programme. Improving computer skills.  Literacy, Numeracy, Digital Literacy | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Numeracy: Measuring and marking to stated tolerance. | | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Following instructions  CAD design skills  Digital literacy – Using Inventor 3D modelling programme. Improving computer skills.  Numeracy – working within set tolerances. | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Numeracy: Measuring and marking to stated tolerance. | **Key Skills: Literacy/Numeracy/ HWB/Digital Literacy**  HWB - Safety in the workshop and classroom.  Following instructions  CAD design skills  Digital literacy – Using Inventor 3D modelling programme. Improving computer skills.  Numeracy – working within set tolerances. |
| **Skills for learning, work and life**  Transferrable skills for life and work.  Developing hand and motor skills. To improve confidence in using tools.  Developing problem solving skills. Understanding how items go together and work. | **Skills for learning, work and life**  Developing hand and motor skills. To improve confidence in using tools.  Developing problem solving skills. Understanding how items go together and work.  Transferring skills to Science. | **Skills for learning, work and life**  Digital Literacy. Gaining an understanding of how to use CAD and improving computer knowledge. | **Skills for learning, work and life**  Developing hand and motor skills. To improve confidence in using tools.  Developing problem solving skills. Understanding how items go together and work.  Transferring skills to Science. | **Skills for learning, work and life**  Digital Literacy. Gaining an understanding of how to use CAD and improving computer knowledge. | **Skills for learning, work and life**  Developing hand and motor skills. To improve confidence in using tools.  Developing problem solving skills. Understanding how items go together and work. | | **Skills for learning, work and life**  Digital Literacy. Gaining an understanding of how to use CAD and improving computer knowledge. | **Skills for learning, work and life**  Developing hand and motor skills. To improve confidence in using tools.  Developing problem solving skills. Understanding how items go together and work.  Transferring skills to Science. | **Skills for learning, work and life**  Digital Literacy. Gaining an understanding of how to use CAD and improving computer knowledge |
| **Home Learning**  **Health & Safety Task. (**  **Recapped throughout year.)** | **Home Learning**  **Safety**  **Woodworking Tools**  **Numeracy - Measuring**  **Materials – Manufactured boards**  **Feedback** | **Home Learning**  **Orthographic visualisation** | **Home Learning**  **Materials – Thermoplastics/Thermosetting plastics**  **Hand tools/machines**  **Finishing - plastics**  **Use of templates**  **Safety** | **Home Learning**  **Sketching**  **Understanding CAD** | **Home Learning**  **Tools/Machines - Metalwork**  **Safety**  **Materials – Ferrous/Non-ferrous** | | **Home Learning**  **DTP Features**  **Colour Theory** | **Home Learning**  **Safety**  **Materials – Softwood/Hardwood**  **Woodworking tools** | **Home Learning**  **CAD setup**  **2D CAD commands**  **3D CAD commands** |