



Explorer

Explorer Curriculum – Building block to Formal Curriculum

- The building block before a fully formal curriculum.
- Strong focus on Early Literacy and Numeracy.
- Key skills and knowledge to understand the world around them.
- Functional Skills to apply basic knowledge.
- For children with moderate learning difficulties, autism and other learning needs. Learning takes place through tangible 'real life situations' with regular revisiting of learning.
- Students follow an Entry Level (1-3) Pathway at KS4 and KS5.

8E - Explorer Curriculum – Long Term Plan D.T

	2020 - 2021 Autumn 1 Unit 1	2020 - 2021 Autumn 2 Unit 2	2020 - 2021 Spring 1 Unit 3	2020 - 2021 Spring 2 Unit 4	2020 - 2021 Summer 1 Unit 5	2020 - 2021 Summer 2 Unit 6
Year 8	<p>Topic: Health and Safety Bird Table</p> <p>Key Questions:</p> <p>What are the rules for the workshop? When can you use a hand tool or machine in the workshop? Bird table: What materials are we using? What is a 'Farmhouse/ Cottage Style'? What are the two joints we are using? Can you name 2 tools? What is a drilling jig? What is template? Why is it better to recycle materials? What are the names</p>	<p>Topic: Mechanical toy. Mechanisms.</p> <p>Key Questions:</p> <p>Who are two of the main characters in 'The Lion , Witch, Wardrobe'? What are the three classes of lever- give examples for each lever? What is a cam? Can you name a cam and describe how it works? Can you identify differences between gears and pulley systems? Name two joints we are using? What material are we using? What are the</p>	<p>Topic: Acrylic Salad Servers</p> <p>Key Questions:</p> <p>Can you find examples of designs you like made by the Alessi Design group? Can you describe a feature you like? What are the two types of plastic? Where does Plastic come from? What is a specification? What is 'Ergonomics'? Name 2 tools used to cut and shape acrylic? How do we finish the edges of acrylic? How can we bend and shape our</p>	<p>Topic: Steel candle holder 1</p> <p>Key Questions:</p> <p>What is the 'Victorian/ Modernist' design style? Can you find examples of the use of steel in design such as scrollwork? What is a feature? How many classes of metal are there? What metal are we using, Where is it commonly used? What are the properties of steel? How is the steel produced? What is a permanent and non-permanent joint?</p>	<p>Topic: Candle Holder 2</p> <p>Key Questions:</p> <p>What is the Modernist' design stye? Where can you find examples of the use of steel in modern design? What are some of the features? How many classes of metal are there? Can you name any other metals? What are their properties? How is the metal produced? What is a permanent and non-permanent joint?</p>	<p>Topic: Structures</p> <p>Key Questions:</p> <p>What are the forces on a simple bridge? Stone is good for what type of force? Rope or cable is best in what type of force? What are the forces on an arch bridge? Who made arch bridges? How is a girder bridge better than a stone bridge? What and where are the main forces on a suspension bridge? What is a shell structure? Where do we see shell structures in nature and industry?</p>

<p>of an adhesive for wood?</p> <p>Key Skills and knowledge:</p> <p>Review Health and Safety. FPT Make a wooden bird table, Research and analysis skills: Identify 2 Key features. Know Properties of Pine. Properties of softwood. Know 2 basic joints, Use basic wood work skills: Measuring, Marking out, sawing on waste side, straight cuts, using pillar drill, using jigs. Dowel, butt, screw and glue joints. Vacuum forming. Assembling dry and gluing up. Basic features of sketchup, use of publisher/ IT skills.</p> <p>Assessment outcome:</p> <p>Base line assessment for: Health and Safety.</p>	<p>properties of MDF? How are man-made boards made?</p> <p>Key Skills and knowledge:</p> <p>Make cam or friction drive toy. properties of Pine and PVA. Basic research skills, All to know a lever and cam. High ability to differentiate between types of lever, types of cam, cam pulley and gears. Use variety of materials and measure cut and shape to make a mechanical system.. Supported design of shape linked to research. Use basic wood work skills (linked to English) curved sawing, drilling holes, marking out, Evaluation Compare outcome to design.</p> <p>Assessment outcomes:</p> <p>Research characters, Design reflects character and desired movement/ output, CAD Sketchup, knowledge of mechanisms.</p>	<p>acrylic? What is a former? How can a former build quality into production? What are the H&S issues with the strip heater/ vacuum former? Does the Salad Servers work? do they look good? Will they be used? Why is CAD good for designing?</p> <p>Key Skills and knowledge:</p> <p>Design and make copper pendant with design element based on Mondrian, properties of Copper. Basic research skills, Supported design of shape. Use basic metal work skills (linked to English) curved/ straight sawing, tinsnips/ guillotine, drilling holes, marking out, Enamelling, H&S Compare outcome to design. Design and make Acrylic(plastic) key tag based on design from Salvador Dahli, properties of Acrylic. Basic research skills, Supported design of shape. Use basic plastic work skills (linked to English) curved/ straight sawing, filing/ wet and dry, polish, drilling holes, marking out, heating: Strip heater/ vacuum former, H&S Compare outcome to design.</p> <p>Assessment outcomes:</p> <p>Know basic properties of acrylic. Process and tools</p>	<p>What are the H&S issues with the spotwelder? How are we addressing sustainability issues? Recycling, What is FSC? How can we reduce our Carbon footprint?</p> <p>Key Skills and knowledge:</p> <p>Research skills and identify key design features of Victorian or Modernist steel work. Design and make steel candle holder with design element based on Victorian/ modernist, properties of steel. Design through sketching and Modelling. Basic research skills, Supported design of shape. Use basic metal work skills (linked to English) curved/ straight sawing, tinsnips/ guillotine, drilling holes, marking out, bending jig, use brazing hearth, annealing, forging, brazing, spot welding. , H&S Compare outcome to design.</p> <p>Assessment outcomes:</p> <p>Research skills, analysis, design/ sketching drawing skills</p>	<p>What are the H&S issues with the spotwelder, mig welder, arc welder? Name the wood we are using? How are we addressing sustainability issues? Recycling, What is FSC? How can we reduce our Carbon footprint?</p> <p>Key Skills and knowledge:</p> <p>Design and make steel candle holder with wooden base. Design elements based on research, properties of steel. Research skills, Identify key features. Supported design of shape. Use basic metal work skills. Curved/ correct saw, files, tinsnips/ guillotine, drilling holes, marking out, spot welding, H&S Compare outcome to design.</p> <p>Assessment outcomes:</p> <p>design, Model+Template, properties of steel and ferrous metals, marking</p>	<p>Investigate structures in nature and man-made. Structures: real life examples. Identify features. Identify stresses/ forces. Test and build a variety of structures. beam, girder/ truss. Triangulation. Arch. Shell. Using softwood, paper, card PVA, glue gun and vacuum formed plastic. Evaluation.</p> <p>Assessment outcome:</p> <p>Knowledge of basic forces. Properties of materials linked to use in a structure. Frame structure, shell structure, bridge structure,</p>
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	<p>Making skills, Use of basic wood work skills. Effort making, research, independence. Use of CAD, research and IT skills.</p>	<p>Template, marking out, cutting shaping curves. Accurate drilling and finish. Practise Man-made boards MDF. Evaluate against the design and intended output/ movement..</p>	<p>for cutting, shaping and finishing acrylic. Design a template and use to mark out, shape, finish. Use of heat and press to form and shape acrylic. Test and evaluate.</p>	<p>and modelling skills. Properties of metals/ wood. Joining metals/ woods. Shaping metal/wood. H&S issues. Evaluate.</p>	<p>out, cutting shaping filing curves. Spot welding and finish.</p>	<p>Arch, Triangulation.</p>
<p>Links to Gatsby benchmark</p>						

