

## Design Technology KS3 provision

	Resistant Materials	Textiles	Food
<b>Year 7:</b>	<p><b>Handy stand</b> – Multi functional acrylic stand Polymers <a href="https://app.senecalearning.com">https://app.senecalearning.com</a></p> <p><b>Introduced</b> to safe working practices within the workshop</p> <p><b>Health and Safety</b> in Resistant Materials</p> <p><b>Practical skills</b> – using equipment safely to create a polymer handy stand. Using a variety of tools well including – coping saw, files, drilling machines and finishing tools and processes 2D into 3D drawing skills Card Modelling</p> <p><b>Knowledge</b> Identification, properties &amp; uses of polymers.</p> <p>Analysis, design, make, evaluation</p>	<p><b>Textile lamp made with reclaimed materials</b> <a href="https://app.senecalearning.com">https://app.senecalearning.com</a></p> <p><b>Introduction to new skills</b></p> <p><b>Health and safety</b> – getting to know the textile studio, how to safely use equipment</p> <p><b>Practical skills</b> – using equipment safely to create a printed and embroidered lamp</p> <p><b>Knowledge</b> Types of fabrics Sources and origins of fabrics Fabric properties Fabric construction</p> <ul style="list-style-type: none"> <li>• looking into woven fabrics and their products – plain weave for shirts, twill weave for jeans</li> <li>• knitted fabrics – tights/socks and jumper</li> <li>• Bonded fabrics – fleece and felt</li> </ul> <p><a href="https://app.senecalearning.com">https://app.senecalearning.com</a> Analysis, design, make, evaluation</p>	<p><b>Healthy Eating and nutrition</b> <b>Health and safety</b> Introduction Eatwell guide/ macro nutrients</p> <p><b>Practical's:</b></p> <ul style="list-style-type: none"> <li>• -Fruit salad</li> <li>• -Flapjack</li> <li>• -Spicy rice</li> </ul> <p><a href="https://www.foodafactoflife.org.uk/11-14-years/healthy-eating/eat-well/">https://www.foodafactoflife.org.uk/11-14-years/healthy-eating/eat-well/</a></p> <p><b>Knowledge</b> Micro nutrients/ Energy balance/food labelling/ Special diets and needs of people/ sensory testing</p> <p>Practical's:</p> <ul style="list-style-type: none"> <li>• -scone- cheese and onion</li> <li>• -Fruit crumble</li> <li>• -bread rolls- shaped</li> </ul> <p><a href="https://www.foodafactoflife.org.uk/11-14-years/healthy-eating/energy-and-nutrients/">https://www.foodafactoflife.org.uk/11-14-years/healthy-eating/energy-and-nutrients/</a></p>

<b>Year 8:</b>	<p><b>Jewellery – Made with casting metal</b></p> <p><b>Metals</b>  <a href="https://app.senecalearning.com/">https://app.senecalearning.com/</a>  Metals and alloys  <a href="https://resistantmaterials.weebly.com/metals-and-alloys.html">https://resistantmaterials.weebly.com/metals-and-alloys.html</a></p> <p><b>Skills</b>  Successfully and accurately create an MDF mould  Work safely to operate the crucible to pour their own molten metal under supervision.  Work with care to produce a polished high-quality finish</p> <p><b>Knowledge</b>  Understand ACCESS FM when investigating existing products  Be able to draw in 3D adding thickness in Oblique projection  Using card to model their compassionate design  Analysis, design, make, evaluation</p>	<p><b>Textiles washbag with zip</b>  <a href="https://app.senecalearning.com/">https://app.senecalearning.com/</a></p> <p><b>Strengthen skills</b>  Health and safety – students reiterate using equipment safely  Practical skills – product construction following instructions. Adding a zip.</p> <p><b>Knowledge</b>  Scales of manufacture</p> <ul style="list-style-type: none"> <li>• One off</li> <li>• Batch</li> <li>• Mass</li> </ul> <p>Technology push and market pull  Culture  Iterative design process and user centred design  <a href="https://app.senecalearning.com/classroom/">https://app.senecalearning.com/classroom/</a>  Analysis, design, make, evaluation</p>	<p><b>Cultural cuisine</b>  Italian/Indian/ British foods</p> <p><b>Practical's:</b></p> <ul style="list-style-type: none"> <li>• -sausage rolls</li> <li>• -Bread based pizza (yeast)</li> <li>• -Egg fried rice</li> </ul> <p><a href="https://www.foodafactoflife.org.uk/11-14-years/where-food-comes-from/food-availability/">https://www.foodafactoflife.org.uk/11-14-years/where-food-comes-from/food-availability/</a></p> <p><b>Knowledge</b>  Fair trade/ where our food comes from (Farming/ Fishing and crops)/  Seasonality/local/ environmental concern/  sensory testing/ sensory analysis</p> <p>Practical's:</p> <ul style="list-style-type: none"> <li>• -Potato layer bake</li> <li>• -Banana loaf</li> <li>• -Chicken fajitas</li> </ul> <p><a href="https://www.foodafactoflife.org.uk/11-14-years/where-food-comes-from/">https://www.foodafactoflife.org.uk/11-14-years/where-food-comes-from/</a></p>
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<b>Year 9:</b>	<p><b>Ipad stand</b> – Made using Manufactured boards &amp; various joining methods  <a href="https://app.senecalearning.com/">https://app.senecalearning.com/</a></p> <p>Ipad stand – Made using Manufactured boards &amp; various joining methods          Joints  <a href="https://technologystudent.com/pdfs/jointq1.pdf">https://technologystudent.com/pdfs/jointq1.pdf</a></p> <p><b>Skills</b>          Successfully manufacture a storage unit using tenon and coping saws. Use files and glass paper to develop a varnished finish of good quality          Manufacture for assembly          Work independently within the health and safety expectations</p> <p><b>Knowledge</b>          Apply ACCESSFM elements to existing products          Identification, properties &amp; uses of Timber.          Identification, properties &amp; uses of Manufactured board.          Timber joining methods          Source &amp; origin of timber          How manufactured boards are made          Advantages &amp; Disadvantages          Isometric drawing development using CAD          Iteration of models  <a href="https://www.technologystudent.com/">https://www.technologystudent.com/</a></p>	<p><b>Over the door storage – reclaimed fabrics</b>  <a href="https://app.senecalearning.com/">https://app.senecalearning.com/</a></p> <p><b>Refining skills</b>          Health and safety – students to independently use equipment safely          Practical skills – pattern development and skilled product construction. Adding standard components and pockets.</p> <p><b>Knowledge</b>          Environmental and social impacts/issues          Sustainability and fabrics          Standard components and stock forms          Product development  <a href="https://www.youtube.com/watch?v=pJBRqespiOA">https://www.youtube.com/watch?v=pJBRqespiOA</a>  <a href="https://app.senecalearning.com/">https://app.senecalearning.com/</a>          Analysis, design, make, evaluation</p>	<p><b>Food Safety</b>  <b>Practical's:</b>          -Cheese and onion pasties          -Meat balls and sauce          -Chocolate brownies  <a href="https://www.foodafactoflife.org.uk/11-14-years/cooking/hygiene-and-safety/">https://www.foodafactoflife.org.uk/11-14-years/cooking/hygiene-and-safety/</a></p> <p><b>Knowledge</b>          General health and safety/ food safety/ Risk assessments (hazards and control measures)/Bacteria / food borne ill health/ safe storage/HACCP/Food safety act          Date marks and food labels/ allergies and intolerances/ personal hygiene/ The role of the EHO/ sensory testing and sensory analysis/ evaluating cooking practical's</p> <p><b>Practical's:</b>          -Mini quiches          -Chicken stir fry          -mac and cheese  <a href="https://www.foodafactoflife.org.uk/11-14-years/cooking/hygiene-and-safety/">https://www.foodafactoflife.org.uk/11-14-years/cooking/hygiene-and-safety/</a></p>
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