

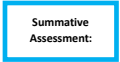


<p><b>This half term: Skills, Knowledge and Understanding to be developed:</b></p> <ul style="list-style-type: none"> <li>• Students will use this half term to develop their thinking skills and be able to work independently.</li> <li>• Students will develop their knowledge of Fibres and Fabrics and Manufacturing Processes. This knowledge will also be used at the end of the year in their GCSE written examination.</li> <li>• Students will demonstrate their understanding and knowledge by identifying how fibres/fabrics/garments are made.</li> <li>• Students will demonstrate their understanding and knowledge by using key terminology.</li> <li>• Students will develop their knowledge as preparation for their GCSE written examination in July.</li> </ul>		<p><b>Key Terms / Words:</b></p> <p>Fibres, fabrics, natural, man-made, synthetic, regenerated, monomer, polymer, plant, animal, jute, silk, bamboo, linen, cotton, angora, cashmere, alpaca, llama, mohair, polyester, nylon, elastane, Lycra, acrylic, viscose, acetate, blended fabrics, construction, weaving, knitted, non-woven, warp, weft, jacquard, pile, herringbone, Kevlar®, Nomex®, Neoprene®, Polartec®, Gore-Tex®, Windstopper, SympaTex®, Spandex, Sun Protecting clothing, Thermochromic, Photochromic, Photo Luminescent, Electro Luminescent, Reflective, Microencapsulation, Biomimetics, Stomatex®, Nanotechnology, microfibrres.</p>	
<p><b>LP 3 – Week 1 Learning Outcomes: THEORY ELEMENT:</b></p> <p><b>1. Students will..... Introduction to fibres &amp; fabrics</b></p> <ul style="list-style-type: none"> <li>* Understand where fibres came from</li> <li>* Know the different categories of fibres</li> <li>* Be able to identify the different fabric construction methods</li> </ul> <p><b>2. Students will..... Natural Fibres (Plant based fibres)</b></p> <ul style="list-style-type: none"> <li>* Know where natural fibres come from &amp; categorise them</li> <li>* Be able to identify the properties &amp; uses of commonly used plant fibres eg cotton, linen, bamboo, hemp, jute and soya.</li> </ul>		<p><b>Objective Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Students will be aware of the topic for LP3 and gain an outline of the areas covered.</li> <li>2. Students will be able to identify plant based fibres and explain their properties &amp; uses.</li> </ol>	<p><b>Homework LP3 1</b></p> <p>Homework: 'Product Specification' Task and 'Manufacturing Specification' Task</p> <p><i>Lonsdale Revision Guide</i></p>
<p><b>LP 3 – Week 2 Learning Outcomes: THEORY ELEMENT:</b></p> <p><b>3. Students will..... Natural Fibres (Animal based fibres)</b></p> <ul style="list-style-type: none"> <li>* Know where natural fibres come from &amp; categorise them</li> <li>* Be able to identify the properties &amp; uses of commonly used animal fibres eg wool, silk, angora, cashmere, alpaca, llama and mohair.</li> </ul> <p><b>4 and 5. Students will..... Synthetic Fibres (man-made fibres)</b></p> <ul style="list-style-type: none"> <li>* Know how synthetic fibres are produced, identifying key types.</li> <li>* Be able to identify the properties &amp; uses of commonly used synthetic fibres eg acrylic, polyester, nylon, and elastane/Lycra.</li> </ul>		<p><b>Objective Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Students will be able to identify animal based fibres and explain their properties &amp; uses.</li> <li>2. Students will be able to identify synthetic fibres and explain their properties &amp; uses.</li> </ol>	<p><b>Homework LP3 2</b></p> <p>Homework: 'Fibres and Yarns Task</p> <p><i>Lonsdale Revision Guide</i></p>
<p><b>LP 3 – Week 3 Learning Outcomes: THEORY ELEMENT:</b></p> <p><b>6. Students will..... Regenerated Fibres (man-made fibres)</b></p> <ul style="list-style-type: none"> <li>* Know how regenerated fibres are produced, identifying key types.</li> <li>* Be able to identify the properties &amp; uses of commonly used regenerated fibres eg viscose, acetate and Lyocell</li> </ul> <p><b>7. Students will..... Blended &amp; Mixed Fibres</b></p> <ul style="list-style-type: none"> <li>* Know why fibres are mixed and blended together.</li> <li>* Be able to identify the properties &amp; uses of commonly used blended fabrics eg polyester/cotton, nylon/wool, nylon/acetate, wool/cotton, linen/silk, silk/wool, and Rayon/cotton.</li> <li>* Understand the benefits of TACTEL® blended fabric technology.</li> <li>* Understand the benefits of Modal® blended fabric.</li> </ul>		<p><b>Objective Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Students will be able to identify regenerated fibres and explain their properties &amp; uses.</li> <li>2. Students will be able to identify blended fabrics and explain their properties &amp; uses.</li> </ol>	<p><b>Homework LP3 3</b></p> <p>Homework: 'Fabrics' Task</p> <p><i>Lonsdale Revision Guide</i></p>
<p><b>LP 3 – Week 4 Learning Outcomes: THEORY ELEMENT:</b></p> <p><b>8. Students will..... Fibres to yarns</b></p> <ul style="list-style-type: none"> <li>* Understand how fibres are turned into yarns</li> <li>* Be able to identify a range of different types of yarns eg single, folded, cabled, textured, and novelty.</li> </ul> <p><b>9. and 10. Students will..... Fabric Construction</b></p> <ul style="list-style-type: none"> <li>* Be able to identify the different types of fabric construction.</li> <li>* Be able to identify the properties &amp; uses of commonly used woven fabrics eg plain, twill, satin, pile, herringbone and jacquard.</li> <li>* Be able to identify the properties &amp; uses of commonly used knitted fabrics eg warp and weft knitting</li> <li>* Be able to identify the properties &amp; uses of commonly used non-woven fabrics eg felt</li> </ul>	<p style="text-align: center;">   <b>APP1</b>                  APP1 task:                  Examination Question/s:                  Fibres &amp; Fabrics  <hr/>                 Mark:  <hr/>                 Grade:             </p>	<p><b>Objective Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Students will be able to explain how fibres are turned in yarn &amp; describe the various yarns available.</li> <li>2. Students will be able to identify the different construction methods and explain their properties &amp; uses.</li> </ol>	<p><b>Homework LP3 4</b></p> <p>Homework: 'Properties of Fibres and Fabrics' Task</p> <p><i>Lonsdale Revision Guide</i></p>

<p><b>LP 3 – Week 5 Learning Outcomes: THEORY ELEMENT:</b></p> <p><b>11. Students will..... Modern Materials/Fabrics</b></p> <ul style="list-style-type: none"> <li>* Understand what modern materials are and why they have been developed.</li> <li>* Be able to identify the different types of modern materials.</li> <li>* Be able to identify the properties &amp; uses of commonly used modern materials eg Kevlar®, Nomex®, Neoprene®, Polartec®, Gore-Tex®, Windstopper, SympaTex®, Spandex, and Sun Protecting clothing.</li> </ul> <p><b>12. Students will..... Smart Materials/Fabrics</b></p> <ul style="list-style-type: none"> <li>* Understand what smart materials are and why they have been developed.</li> <li>* Be able to identify the different types of smart materials.</li> <li>* Be able to identify the properties &amp; uses of commonly used modern materials eg Thermochromic, Photochromic, Photo Luminescent, Electro Luminescent, Reflective, Microencapsulation, Biomimetics, Stomatex®.</li> </ul>	  <p><u>Summative</u> <u>Assessment task:</u> Mock Examination</p> <div style="border: 2px solid red; padding: 5px; width: fit-content; margin: 0 auto;"> <p>Mark:</p> <p>Grade:</p> </div>	<p><b>Objective Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Students will be able to identify modern fabrics and explain their properties &amp; uses.</li> <li>2. Students will be able to identify smart materials and explain their properties &amp; uses.</li> </ol>	<p><b>Homework LP3 5</b></p> <p>Homework: 'Finishes' Task</p> <p><i>Lonsdale Revision Guide</i></p>
<p><b>LP 3 – Week 6 Learning Outcomes: THEORY ELEMENT:</b></p> <p><b>13. Students will..... Interactive/Technical Materials</b></p> <ul style="list-style-type: none"> <li>* Understand what interactive materials are and why they have been developed.</li> <li>* Be able to identify the different types of interactive materials.</li> <li>* Be able to identify the properties &amp; uses of commonly used interactive materials eg Conductive textiles, Gorix, electric sensor fabrics, power assisted fabrics and communication materials.</li> </ul> <p><b>14 and 15. Students will..... Nanotechnology Materials/Fabrics</b></p> <ul style="list-style-type: none"> <li>* Understand what Nanotechnology materials are and why they have been developed.</li> <li>* Be able to identify the properties &amp; uses of NanoGrain.</li> <li>* Understand the advantages and disadvantages of Microfibres</li> </ul>		<p><b>Objective Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Students will be able to identify Technical Materials and explain their properties &amp; uses.</li> <li>2. Students will be able to identify Nanotechnology Materials and explain their properties &amp; uses.</li> </ol>	<p><b>Homework LP3 6</b></p> <p>Homework: 'Components' Task</p> <p><i>Lonsdale Revision Guide</i></p>

**This programme is subject to change.**