

## **Technology at Lord Lawson of Beamish Academy**

### **What are the aims of the department?**

We believe that Technology equips students with skills that are needed throughout life. Through the teaching of theory and practical skills in food, textiles and design, Technology prepares students for life beyond education. Our mission is to ensure that all students leave this school with the necessary practical skills needed to live independently.

Our aim is to inspire students to become engineers, architects, chefs, fashion designers or health care workers and our curriculum pathways are designed to enable students to progress and thrive in a practical subject with confidence, equipping them with the knowledge and skills to succeed beyond school and in the workplace.

### **What will my child study in years 7, 8 and 9?**

In Key Stage 3 students study 3 units on a carousel across the year. All students experience the different disciplines of textiles, food and nutrition and resistant materials. Please click on the links below to see the focus of the unit, a detailed overview of the knowledge and skills your child will develop in each area and the key vocabulary learned in each unit.

Year 7

Year 8

Year 9

### **What will my child study in years 10 and 11?**

In Key stage 4 students have the option to study Child Development, Construction, 3D, textiles or hospitality and catering. Vocational courses have both an element of coursework and written examination. 3D design and textiles are 100% teacher assessed and externally moderated by the exam board. 60% of the overall grade comes from a coursework portfolio usually consisting of two projects or one sustained project and supporting material. The portfolio covers the 4 assessment objectives. The remaining 40% of the grade comes from an externally set assignment, a task set by the exam board, with a 12-week preparatory period, culminating in a 10 hour supervised time period

Year 10

Year 11

### **What will my child study in years 12 and 13?**

In Key Stage 5 students have the option to study Health and Social Care. The course has both an element of coursework and written examination. Please click on the links below to see the focus of the unit, a detailed overview of the knowledge and skills your child will develop in each area and the key vocabulary learned in each unit.

Year 12

Year 13

Year 7

|                               | Unit 1  | Unit 2  | Unit 3   |
|-------------------------------|---|---|--|
| <b>Topic/Theme/<br/>Genre</b> | <p style="text-align: center;">Resistant Materials and 3D Design</p> <p>Students are given a brief to design and create a wooden toy. Students will develop their understanding of the features of a successful toy by researching different designers and artists.</p> <p>Students will create their own BLOKBOT toy by:</p> <ul style="list-style-type: none"> <li>● Investigating topics, themes, artists and designers</li> <li>● Designing products using different drawing techniques</li> <li>● Making products using different materials, methods and equipment.</li> </ul> | <p style="text-align: center;">Food &amp; Nutrition</p> <p>Students investigate a range of ingredients, kitchen equipment, and food preparation techniques to manufacture food products for real life situations. Students learn how to work safely and hygienically in a food classroom as well as developing an understanding of the effects of a poor diet on the body and health. Through both theory and practical lessons students will learn:</p> <ul style="list-style-type: none"> <li>● Hygiene and Safety in the kitchen</li> <li>● Ingredients and nutrition</li> <li>● The Eatwell guide</li> <li>● Kitchen equipment</li> <li>● Weighing and measuring ingredients</li> </ul> | <p style="text-align: center;">Textiles</p> <p>Students are given a brief to design and create a soft toy monster. Students will develop their understanding of the features of a successful soft toy by researching different designers and artists.</p> <p>Students will create their own Monster bean bag by:</p> <ul style="list-style-type: none"> <li>● Investigate topics, themes, artists and designers</li> <li>● Designing products using different drawing techniques</li> <li>● Making products using different materials, methods and equipment.</li> </ul> |

|                       |  |   |   |
|-----------------------|--|---|---|
|                       |  | <ul style="list-style-type: none"> <li>• Knife skills</li> <li>• Food miles</li> <li>• Cooker &amp; microwave safety</li> </ul>                 | <ul style="list-style-type: none"> <li>• Learning about different strategies for communicating their ideas.</li> </ul>                                      |
| <b>Key vocabulary</b> | Design<br>Technology<br>Measure<br>Mark out<br>Cut<br>Shape<br>Smooth<br>Join<br>Drill<br>Sand<br>Vice<br>Health<br>Safety | Research<br>Annotate<br>Ingredient<br>Hygiene<br>Nutrition<br>Vegetable<br>Measure<br>Equipment<br>Weigh<br>Knife<br>Whisk<br>Scales<br>Boiling | Blanket Stitch<br>Applique<br>Chain Stitch<br>Sequins<br>Embroidery<br>Thread<br>Cross Stitch<br>Running stitch<br>Back stitch<br>Needle<br>Pin<br>Scissors |

|  |           |                 |  |
|--|-----------|-----------------|--|
|  | Colour    | Method          |  |
|  | Pattern   | Grilling        |  |
|  | Character | Sensory testing |  |
|  | Decorate  | Appearance      |  |
|  | Embellish |                 |  |
|  | Accuracy  |                 |  |

Year 8

|                               | Unit 1   | Unit 2   | Unit 3   |
|-------------------------------|--|--|--|
| <b>Topic/Theme/<br/>Genre</b> | <p style="text-align: center;">Resistant Materials and 3D Design</p> <p>Students are given a brief to design and create a model lamp. Students will learn about different design movements and how these can influence and inspire new designs. Students will create a scale model using modelling materials, and will develop a NET to package the product.</p> <p>Students will create their own model lamp by:</p> <ul style="list-style-type: none"> <li>● Investigating topics, themes, artists and designers</li> <li>● Designing products using different drawing techniques</li> <li>● Developing a 2D NET to make a 3D package</li> </ul> | <p style="text-align: center;">Food &amp; Nutrition</p> <p>Students investigate a range of ingredients, kitchen equipment, and food preparation techniques to manufacture food products for real life situations. Students learn how to work safely and hygienically in a food classroom as well as developing an understanding of the effects of a poor diet on the body and health. Through both theory and practical lessons students will learn:</p> <ul style="list-style-type: none"> <li>● Competent, safe and skilful use of small- and large-scale kitchen equipment, such as knives, utensils, oven and hob.</li> <li>● High-level awareness of personal, kitchen and food hygiene</li> <li>● Precision in weighing/ measuring wet and dry ingredients, preparing ingredients, combining and mixing ingredients</li> </ul> | <p style="text-align: center;">Textiles</p> <p>Students are given a brief to design and create a small cushion. Students will develop their understanding of the features of a successful cushion by researching different themes, designers and artists.</p> <p>Students will create their own cushion by:</p> <ul style="list-style-type: none"> <li>● Investigating topics, themes, artists and designers</li> <li>● Designing products using different drawing techniques</li> <li>● Learning different methods to decorate and embellish fabric</li> <li>● Creating samples and test pieces</li> <li>● Pattern cutting</li> <li>● Using a sewing machine</li> </ul> |

|                       |   |  |  |
|-----------------------|---|--|--|
|                       | <ul style="list-style-type: none"> <li>• Making products using different materials, methods and equipment.</li> </ul> | <ul style="list-style-type: none"> <li>• Adapting recipes and demonstrating more complicated practical skills</li> </ul>                     | <ul style="list-style-type: none"> <li>• Making products using different materials, methods and equipment.</li> </ul>                                      |
| <b>Key vocabulary</b> | Design<br>Technology<br>Scale<br>Measure<br>Mark out<br>Cut<br>Shape<br>Smooth<br>Join<br>Drill<br>Sand<br>Vice       | Ingredient<br>Method<br>Hygiene<br>Nutrition<br>Measure<br>Equipment<br>Weigh<br>Knife<br>Scales<br>Sensory testing<br>Appearance<br>Texture | Mood board<br>Blanket Stitch<br>Applique<br>Chain Stitch<br>Sequins<br>Embroidery<br>Thread<br>Cross Stitch<br>Fabric<br>Felt<br>Pattern<br>Sewing machine |

|  |                 |             |             |
|--|-----------------|-------------|-------------|
|  | Health          | Flavour     | Batik       |
|  | Safety          | Odour       | Block print |
|  | Design Movement | Rubbing- in | Iron        |
|  | Colour          | Kneading    |             |
|  | Pattern         | Shaping     |             |
|  | Accuracy        | Batch       |             |
|  | NET             |             |             |

Year 9

|                               | Unit 1   | Unit 2  | Unit 3  |
|-------------------------------|--|---|---|
| <b>Topic/Theme/<br/>Genre</b> | <p style="text-align: center;">Resistant Materials and 3D Design</p> <p>Students are given a brief to design and create a wildlife product. Students will investigate the theme through internet - based research. They will use their research to inspire new designs. Students will create a functional product from new and recycled materials.</p> <p>Students will create their product by:</p> <ul style="list-style-type: none"> <li>● Investigating a theme</li> <li>● Designing products using 2D and 3D drawing techniques</li> <li>● Colour-rendering to achieve realistic surface finishes</li> <li>● Making products using different materials, methods and equipment.</li> </ul> | <p style="text-align: center;">Food &amp; Nutrition</p> <p>Students will investigate a wider range of ingredients, kitchen equipment, and food preparation techniques and gain greater understanding of preparing food for real-life situations, and the world of hospitality &amp; catering. Through both theory and practical lessons students will learn:</p> <ul style="list-style-type: none"> <li>● Competent, safe and skilful use of small- and large-scale kitchen equipment, such as knives, utensils, oven and hob.</li> <li>● High-level awareness of personal, kitchen and food hygiene</li> <li>● Precision in weighing/ measuring wet and dry ingredients, preparing ingredients, combining and mixing ingredients</li> <li>● The functions of ingredients in bread, pastry, pasta, and other products including eggs and meat.</li> </ul> | <p style="text-align: center;">Textiles</p> <p>Students are given a brief to design and customise a t-shirt to wear to a music festival. Students will develop their understanding of the features of a successful t-shirt design by researching different themes, designers and artists.</p> <p>Students will customise their own t-shirt by:</p> <ul style="list-style-type: none"> <li>● Investigating topics, themes, artists and designers</li> <li>● Designing products using different drawing techniques</li> <li>● Learning different methods to decorate and embellish fabric</li> <li>● Learning different methods to customise clothing</li> <li>● Creating samples and test pieces</li> <li>● Using a sewing machine</li> <li>● Making products using different materials, methods and equipment.</li> </ul> |

|                       |   |  |   |
|-----------------------|---|--|---|
|                       |   | <ul style="list-style-type: none"> <li>Adapting recipes and demonstrating more complicated practical skills</li> </ul>   |   |
| <b>Key vocabulary</b> | <p>Measure</p> <p>Mark out</p> <p>Cut</p> <p>Shape</p> <p>Smooth</p> <p>Join</p> <p>Drill</p> <p>Sand</p> <p>Vice</p> <p>Safety</p> <p>Accuracy</p> <p>Hegner saw</p> <p>Coping saw</p> | <p>Hygiene</p> <p>Weigh</p> <p>Knife</p> <p>Scales</p> <p>Appearance</p> <p>Texture</p> <p>Flavour</p> <p>Odour</p> <p>Rubbing- in</p> <p>Kneading</p> <p>Shaping</p> <p>Batch</p> <p>Catering</p> | <p>Mood board</p> <p>Applique</p> <p>Sequins</p> <p>Embroidery</p> <p>Cross Stitch</p> <p>Fabric</p> <p>Pattern</p> <p>Sewing machine</p> <p>Batik</p> <p>Block print</p> <p>Iron</p> <p>Transfer print</p> <p>Heat press</p> |

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|--|--|--|--|
|  |  | Hospitality<br>Food labelling<br>Nutritional information |  |
|--|--|--|--|