# Continuity Curriculum

*An online shadow curriculum for students temporarily out of lessons to ensure continuity of learning*

## Year 8 Design and Technology

| Carousel Week | Lesson Title | Lesson Objective | Online Lesson Link | Any additional instructions? |
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| One | **Double Lesson 1:**<br><br>Context and Task analysis | Identify and explain the purpose, target user, and function of an LED picture frame based on a given design brief.<br><br>Analyze similar existing products and record key findings (e.g., materials, style, power source) to inform their own design ideas. | https://www.youtube.com/watch?v=8YcPrSenKvc<br><br>https://www.youtube.com/watch?v=4IZobnVrgSo<br><br>https://www.youtube.com/watch?v=78HdVXypAs4<br><br>https://qualifications.pearson.com/content/dam/pdf/GCSE/design-and-technology/2017/Teaching%20and%20learning%20materials/delivery-guide-1-1.pdf | Use the following information to compare existing products (LED picture frame) using cost, material, size, aesthetics and power source) |
| Two | **Double Lesson 2:**<br><br>Research Mood board and Initial ideas | Visually communicates their design theme, influences, and possible materials for an LED picture frame.<br><br>Generate and present at least two annotated initial design ideas that reflect their research and are suitable for the target user and purpose. | https://qualifications.pearson.com/content/dam/pdf/GCSE/design-and-technology/2017/Teaching%20and%20learning%20materials/delivery-guide-2-5.pdf | Create a mind map and mood board of an object that is used to display photos. |
| Three | **Double Lesson 3:**<br><br>Introduction to Electronics and Electronic Components | Be able to identify and explain the function of basic electronic components used in the LED circuit (e.g., LED, resistor, battery, switch, wires).<br><br>Correctly assemble a simple LED circuit on a breadboard or using basic components, demonstrating safe and accurate handling of electronic parts. | EDEXCEL GCSE Design Technology: Electronic Systems (1.6) | Create a table showing no less than 10 electron components showing: symbol and their function. |
| Four | **Double Lesson 4:**<br><br>Making of Frame - Timber | Students will be able to measure, mark, and cut timber accurately using appropriate tools and techniques, following their design specifications.<br><br>Students will demonstrate safe and effective use of hand tools (e.g., saws, bench hooks, | Which Wood Joinery Method is Strongest? Let's Find out! | Make a table Showing the difference between Hardwood and Software which should include their working properties. |

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| | | sanding blocks) while assembling the wooden frame structure. | | |
| Five | **Double Lesson 5:**<br><br>Soldering Components | Students will be able to identify and correctly position electronic components on a circuit board or stripboard in preparation for soldering.<br><br>Students will demonstrate safe and effective soldering techniques to create secure and functional electrical connections for their LED circuit. | Soldering Tutorial for Beginners: Five Easy Steps | Write a detailed instruction on how to use the soldering iron. |
| Six | **Double Lesson 6:**<br><br>Final Design Finishing(sanding/polishing) & Assessment of Product | Be able to apply appropriate finishing techniques (e.g., sanding, polishing, painting) to enhance the appearance and quality of their wooden picture frame.<br><br>Students will evaluate their finished product against the design brief and success criteria, identifying strengths and areas for improvement in both function and aesthetics. | EDEXCEL GCSE Design Technology: Surface Treatments and Finishes (7.8)<br><br>https://www.youtube.com/watch?v=oFwWrAq47io | After watching the videos use google slides to create slides of different types of surface finishes used on timber. |