

Alderman's Green Design Technology – Autumn Term 2022

Lower Key Stage 2	Year 3	
	Practical skills, techniques and technical knowledge	Context
Tools and Joining	Measure and mark with reasonable accuracy. Cut using scissor to a marked line. Join appropriately using different glues (stick, PVA) and tape	This is a stand-alone unit. <i>Possible ideas:</i> <ul style="list-style-type: none">- Banish broken biscuits! Design and make packaging for shortbread biscuits.- Design and make a gift box (for Christmas) for a specific person.- Make a Christmas bauble and design and make the box for it. Design, Make, Evaluate: <i>To make a Christmas bauble and design and make its box for a special person</i>
Mechanisms	N/A	
Structures	Create a shell or frame structure using diagonal struts to strengthen. Cut slots in card Prototype and build shell structures making improvements	
Vocabulary	three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision, evaluating, design brief design criteria, innovative, prototype	
Questions to support with planning and assessment	Developing, planning and communicating ideas: <ul style="list-style-type: none">• Can they show that their design meets a range of requirements?• Can they put together a step-by-step plan which shows the order and also what equipment and tools they need?• Can they describe their design using an accurately labelled sketch and words?• How realistic is their plan? Working with tools, equipment, materials and components to make quality products: <ul style="list-style-type: none">• Can they use equipment and tools accurately? Evaluating processes and products: <ul style="list-style-type: none">• Can they explain what they changed which made their design even better? Shell Structures: <ul style="list-style-type: none">• Do they use the most appropriate materials?• Can they use more sophisticated methods for stiffening/ strengthening structures?• Do they know what a net is?• Do they know the names of more complex 3D shapes?• Can they work accurately to make cuts and holes?• Can they measure, mark out, cut and join materials in different ways?• Can they test a material's strength?	

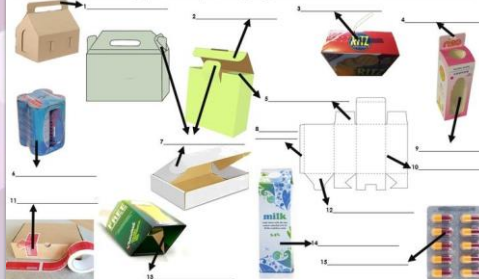
Ideas:



Over the next few lessons you will be designing, making and evaluating your own packaging boxes for a particular purpose.

Parts of a Packaging

Name the following parts of packaging. What is the function of each?



Can you think of any other **design criteria** for our Christmas baubles?

Which of the **design criteria** are you going to work towards when making your bauble?

Think, pair, then share your ideas.

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Useful links:

- <https://barlowsprimary.co.uk/wp-content/uploads/2020/06/DT-Packaging-Examples.pdf> (worksheet looking at different packaging)
- <https://www.data.org.uk/shop-products/nets-for-packaging-helpsheet/> (Nets for packaging)
- https://www.primaryresources.co.uk/dandt/dandt1.htm#containers_and_packaging (ideas that could be used for packaging)