



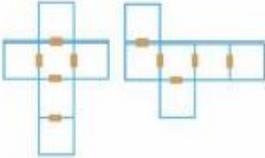
The Project Title	Design, make and evaluate a gift box for a family member.
-------------------	---

What should I already know?
<ul style="list-style-type: none"> <li>I have had experience using different joining, cutting and finishing techniques.</li> <li>I have a basic understanding of 2D and 3D shapes in Maths and everyday uses of materials in Science.</li> <li>I have drawn shapes on Microsoft words.</li> </ul>

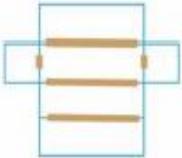
Powerful Knowledge
<ul style="list-style-type: none"> <li>Investigate and evaluate a range of shell structures</li> <li>Use Microsoft word to create shell structures</li> <li>Develop ideas through the analysis of existing shell structures</li> <li>Use Computer Aided Design (CAD) to model and communicate ideas (Microsoft word)</li> <li>Plan the order of the main stages of making</li> <li>Explain choice of materials according to functional qualities and aesthetic qualities</li> </ul>

**Useful Diagrams**

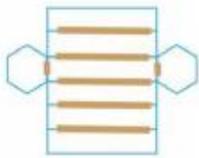
Assemble and evaluate 3-D shapes using standard sized card squares, rectangles, equilateral triangles, isosceles triangles and hexagons, joined with masking tape.



Nets for cubes



Cuboid net



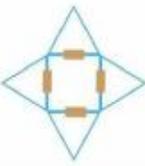
Hexagonal prism net



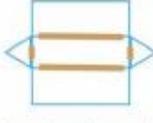
Tetrahedron net



Hexagonal based pyramid net



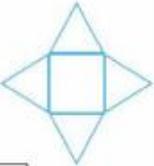
Square based pyramid net



Triangular prism net

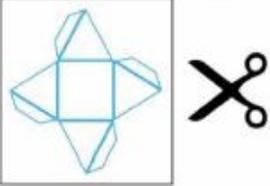
Creating the net for the product you are designing and making without using computer aided design:





Draw the faces and stick them together





Add tabs, glue your paper net onto card and cut out

Vocabulary	
<b>computer aided design (CAD)</b>	The use of computers to aid in the creation of design.
<b>shell structure</b>	A hollow structure.
<b>font</b>	The style and size of text.

