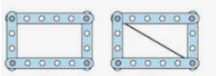


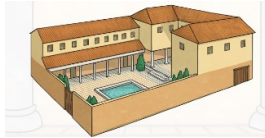
What should I already know?
• Cut dowel using a hacksaw and bench hook • Create shell structures from appropriate materials. • How to create prototype shell structures. • How to use a glue gun with close supervision (one to one) • How to create nets. • How to design a product for others and follow a design criteria • How to generate my own ideas and plan what to do next. • How to describe my design using pictures, words and diagrams. • How to use finishing techniques to make my product look good.

What new skills and knowledge will I acquire?
• How to build frameworks using a range of materials e.g. wood, card.  • How to strengthen frames and structures with diagonal struts.  • How to create prototype frame structures.  • How to measure and mark strips of wood to the nearest cm.  • How to ensure wood is joined together appropriately. 

Design and Technology Knowledge Organiser Topic: Roman Houses Strand: Construction  
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What will I be able to do by the end of the unit?
Design • Use research for design ideas and begin to create my own design criteria. • Make and explain design decisions, considering availability of resources. • Have at least one idea about how to create the Roman House and suggest improvements for my design. • Produce a plan, explain it to others and say how realistic it is. • Make a prototype of the Roman House. • Describe my design using labelled drawings from different views showing specific features. Make • Select suitable tools and equipment, explain my choices in relation to required techniques and use accurately. • Select appropriate materials that are fit for purpose explaining my choices. • Work through my plan in order. • Measure, mark out, cut and shape materials and components with some accuracy. • Assemble, join and combine materials and components with some accuracy. • Apply a range of finishing techniques with some accuracy. • Select appropriate materials that are fit for purpose and explain my choices. Evaluate • Use the design criteria to evaluate products and begin to explain how I could improve the original design. • Evaluate existing products, considering how well they've been made, the materials, whether they work, how they have been made and their fitness for purpose.

Vocabulary	
alterations	The act of making changes in some way.
brace	A brace is a support that helps to steady or strengthen .
butt joint	A butt joint is a wood joint in which the end of a piece of material is simply placed against another piece.
frame structure	A frame structure is made up of a rigid arrangement of parts, or structural components, fastened together.
jinx corners	A triangle is used to reinforce a butt joint corner.
prototype	A prototype is a test, or original, model of a product or a technology from which Improvements, upgrades or fundamental changes can be made.
reinforce	To strengthen or support a structure with additional material.
stability	Stability is often used to describe buildings or structures that won't collapse or fall down.

Existing products	
Wooden huts 	Insulae 
Domus 	Villas 