

Year group:
Year 3



Term: Spring

Construction
and materials

National Curriculum: Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate ideas through discussion, annotated sketches and cross-sectional diagrams. Select from a wide range of tools and equipment to perform practical tasks, cutting, shaping, joining and finishing accurately. Select from a wider range of materials and components according to their functional properties and aesthetic qualities. Evaluate their ideas and products against their own design criteria.

Key Knowledge and skills

- Identify the features of an Anglo-Saxon house.
- Draw a cross-sectional drawing of an Anglo-Saxon house, annotating it with key features.
- Strengthen materials using suitable techniques.
- Cut materials accurately and safely by selecting appropriate tools, such as scissors and coping saw.
- Make products by working efficiently (such as carefully selecting materials).
- Create a 3D net of their initial design by: cutting along the bold lines, folding along the dotted lines, keeping the tables the correct size, making crisp folded edges and gluing securely to assemble the geometric shape.
- Measure and mark out to the nearest millimetre.

Vocabulary

Construct	To make or build something.
3D net	a net is what a 3D (3-dimensional) shape would look like if it were opened flat.
Disassemble	To take something apart.
Cross-sectional diagram	A diagram that shows a section of an object by showing it cut across, sideways, presenting all characteristic parts of it.
Thatched roof	A house roof made with a plant material (straw)
Framework	Structure that forms a support or frame for the house.

Techniques: joining

Apply a small amount of PVA glue to the top of the wood.

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Glue the first triangle here.

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Carefully turn it over. Then glue the second triangle into place.

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Support with card triangles.

Card triangle folded at right angle.

Make a pyramid from square section.

To allow easy joining use a small cube piece in the centre.

Attach opposite sides first.

Make a frame from tubes - make sure it is stable so that it won't fall over and so that it will keep its shape. Will it be tent shaped? Box shaped? Wigwam shaped?

fabric over a triangular frame

Evaluate

- How stable is your completed structure?
- Could you reinforce the design in a different way? Using a different material?
- What joins were the weakest and how could this be overcome?
- Have you been able to include all the characteristics outlined in your cross-sectional model?

Outcome

To create a model of an Anglo-Saxon hut, annotated with key features to present at an Anglo-Saxon topic fare.

Cross-sectional diagram of an Anglo-Saxon hut

1. List the parts of this Anglo-Saxon house.
2. Use these words to help you.

- ched straw roof
- the pit
- sheep
- al pen
- firebox
- wooden chest
- ing benches
- cauldron
- rushes
- ne comb
- wooden floor boards
- try
- table with cloth
- clay pots
- zle pegs (branches)
- baskets
- outh facing window
- spears
- planks of wood
- shield
- you find and label the smoke hole?

