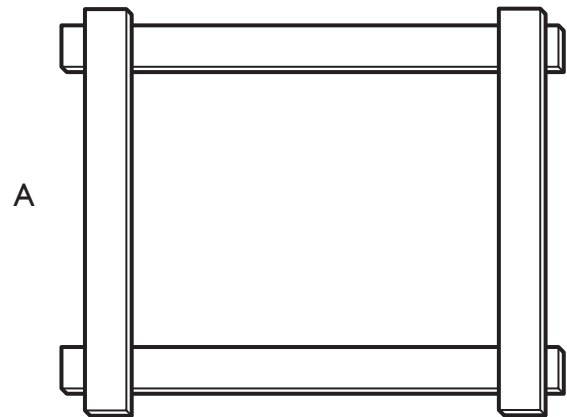
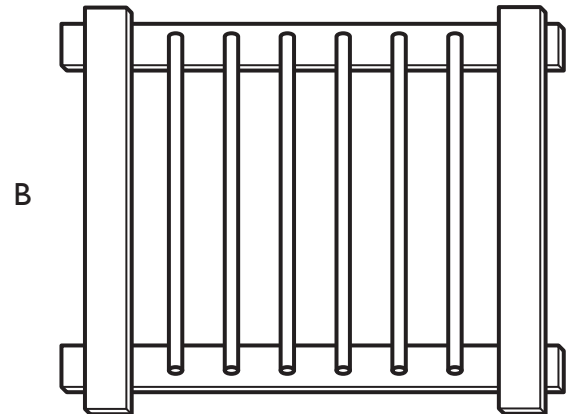


Wattle and daub

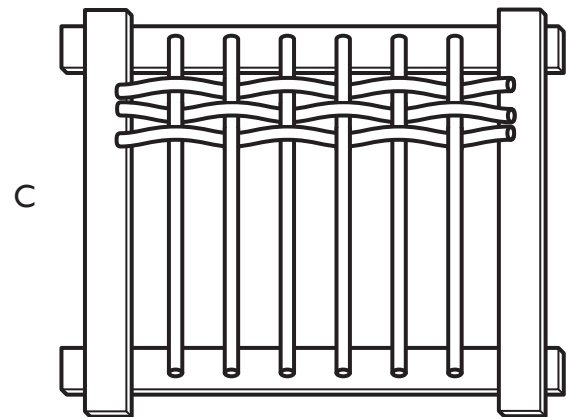
A. Arrange the two shorter pieces of cardboard horizontally and the two longer pieces vertically to make a rectangular frame and stick them together.



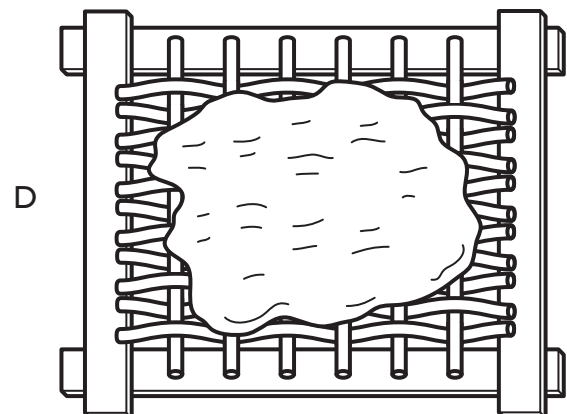
- B. 1. Stick the top of each of the shorter straws to the frame individually to space them out evenly.
2. Stick the bottoms of the straws to the frame with one piece of sticky paper.



C. Weave the longer straws in-between the shorter ones. Push the horizontal straws so that they touch each other and close any gaps between them.



D. Mix flour and water and smear it over the woven straws.



Wattle and daub

Objectives

- To learn how developing some simple techniques with common materials were used in constructing early buildings.

Cross-curricular links

Design and technology

- 2a** Select appropriate techniques for making a product.
- 3a** Reflect on progress of work and identify ways in which they could improve it.

Science

- 2d** Make a fair test.
- 2e** Use simple equipment and materials appropriately and take action to control risks.

Resources

Each child or group will need a copy of worksheet **3** (page 38), six art straws, two pieces of cardboard 2cm x 11cm, two pieces of cardboard 2cm x 13cm, six pieces of flattened art straw 8cm long and eight pieces of flattened art straw 11cm long, sticky paper, scissors, a dish of flour and a cup of water.

You will need a hair-dryer conforming to your school policies set on cool or a balloon pump. You may like to have some extra support in the classroom when the children are using flour and water.

Starter

If the children have studied the Stone Age you may like to remind them of how for a large part of that time people moved around as hunter gatherers and made simple shelters or possibly carried tents as they travelled. In the later Stone Age they settled down to farm and made more permanent structures. The skills acquired in one Age were passed onto people living in another. One example of this is the building of windproof walls by weaving sticks together and blocking the gaps with clay, mud and even manure.

Explain to the children that they are going to make a model wall and test it to see if it is windproof. If it isn't people could die due to the windchill factor where the combination of a low air temperature and wind can lower the body temperature to a fatal level.

Main activities

- Issue worksheet **3** and go through steps A to C with the children, then let them carry them out.
- Let the children test how windproof their wall are by blowing on one side and feeling with their fingers held a few centimetres away on the other side. They should not blow too hard.
- Go through step D with the children then issue the flour and water. Tell the children only to use a small amount of water and add it gradually to make the dough slightly sloppy. It will also work if the dough is quite firm.
- Let the children test how windproof their wall are by blowing on one side and feeling with their fingers held a few centimetres away on the other side. They should not blow too hard.

Plenary

Let the children compare their walls. You may like to perform a fair test with a hair-dryer or balloon pump to see if the wind can be felt at the other side. The children should conclude that when ancient peoples mastered these simple techniques they increased their chances of survival.

Make a circle of small pots or plastic cups and prop up the frames of 'wattle and daub' to make a circular wall. Tell the children that the Celts made house walls like this and in the next activity they will find out how a roof was made above them.

Outcomes

The children can:

- Appreciate that using simple materials and techniques can produce an object which aids survival.
- Follow instructions to make an object.
- Use simple materials and techniques safely.