

Timber! Teacher's sheet

Subject: Maths

Level: KS2

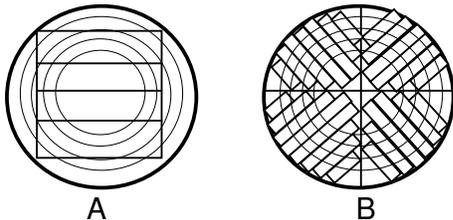


This activity can follow-on from the 'Measuring the Height' sheet

When a tree is cut down people often shout 'timber' to alert others to the fact it is about to crash down.

Then the tree may be used for many different purposes. In the past people made very good use of valuable resources like timber. Even small twigs would be collected, often by children, until the recent past for kindling, as the ability to light a fire to keep warm and cook is one of the most basic human needs.

When experts at the Weald & Downland Open Air Museum work to conserve a building they also need to understand how wood was used in the past to do their work.

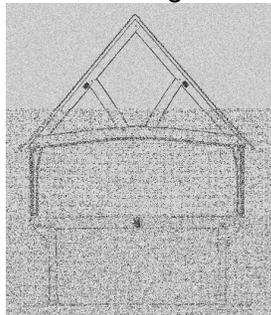


Wood cut either way will mean that there is part of the tree that cannot be used for planks of wood, but there are always other ways this wood can be used.
(To allow for tree rings cutting them as in picture B will mean that the planks don't warp as much over time.)

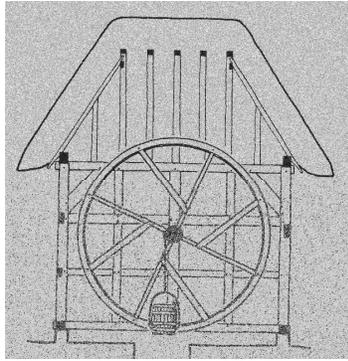
You could measure the width around a tree and get an idea of how many planks of wood you could get from it, if cut as in picture A.

Notice that the timber cuts in picture B are symmetrical. In a timber framed house the symmetrical pieces will be opposite each other. We don't know exactly why carpenters did this, but they did!

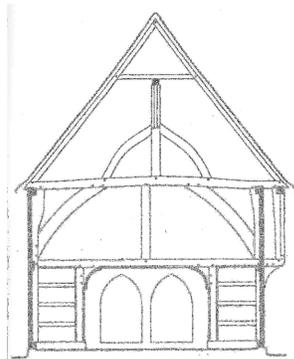
Are the buildings symmetrical? Following on from picture B the class could look at buildings to decide if they are symmetrical or look at buildings they know.
Are there any lines of symmetry in these building?



Market hall from Titchfield



Catherington Treadwheel



Bayleaf Farmhouse



Walderton Cottage

Follow-up:

If you are at the Museum, take a look at a saw-pit. They were where trees were cut down to the sizes that were needed. Also, in our woodyard there is other machinery to do with the conversion of trees to timber.

Growth rings can be counted to find the age of a tree. The fast growth in the spring and early summer is lighter and the slower growth in the winter is darker, so the rings are quite easy to see. Various tree organisations have activities that demonstrate this online, if no cross-section of wood is available.

If you are planning to visit to do this activity at the Museum, please contact our school services team to book your visit on 01243 811459 or email schoolbookings@wealddown.co.uk