

## Comparing digging sticks (i)

How will you make your test fair?

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Stick material		Length before test (cm)	Length after test (cm)
Name	Description		
1			
2			
3			
4			
5			
6			

## Comparing digging sticks (ii)

How did the digging end of each stick change after the test?

1. ....  
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2. ....  
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3. ....  
.....
4. ....  
.....
5. ....  
.....
6. ....  
.....

If you were a Stone Age farmer which tree would you go to for digging sticks?

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# Comparing digging sticks

## Objectives

- To examine how Stone Age people dug in the ground.
- To make fair tests.

## Cross-curricular links

### History

**2a** A characteristic feature of the period.

### Science

**Sc1**

**2d** Make a fair test.

**2e** Use simple equipment and materials appropriately and take action to control risks.

**2i** Make comparisons in their observations.

**2j** Use observations to make conclusions.

**Sc3**

**1a** Compare everyday materials on the basis of their material properties.

## Resources

The class will need access to a piece of bare ground which has not been fouled by dogs or has not been contaminated with broken glass or other rubbish. You may like to designate this area the Stone Age garden and develop it in activity **12**.

You will need pictures of oak, ash, birch, willow, hazel, lime. (These were trees present in Britain in Stone Age times – sycamore and horse chestnut came later). Teacher helpers.

Each child or group will need a short stick (1cm–2cm across) about 15cm long, made of oak, ash, birch, willow, alder, lime, a ruler, a magnifying glass, safety spectacles, a copy of worksheets **11A** and **11B** (pages 52–53).

## Optional

You may like to make a film showing the sticks before use, the children using them and the sticks after use.

## Starter

Tell the children that archaeologists have discovered that Stone Age people used sticks for digging to make buildings and for planting seeds for crops. Show the children pictures of the trees

and say that they were present in Britain in Stone Age times and they were the trees the people used as a resource. Challenge the children to say whether it would make any difference which wood they used for digging and ask them to suggest a way they could compare the wood from different trees. Steer them to consider easily manageable short sticks and the making of a fair test in which each stick is scratched in the ground a certain number of times to make a hole or a line in which seeds could be planted.

## Main activities

1. Issue copies of the worksheet and let the children write their plans for a fair test. When you have approved the plans let them have their sticks and fill in the columns 1 and 2 of the table.
2. Tell them that as there is a section to fill in about how the stick changes they should examine the digging end of the stick closely before they begin and use the magnifying glass.
3. Let the children complete the digging part of the test.
4. The children should return to their classroom and measure their sticks again, re-examine the digging ends and complete the worksheet.

## Plenary

The children should compare the results and conclude that hard woods like oak and ash might be suitable digging sticks but soft woods such as lime and birch are not. If a film has been made of the test it could be displayed on the whiteboard.

## Outcomes

The children can:

- Make thorough observations.
- Conduct a fair test.
- Draw conclusions from observations.