



Trees

A selection of activities for National Tree Day from the Gould League's *Trees Curriculum Guide* .

Copies of the *Trees Curriculum Guide* with the complete selection of activities can be purchased from the Gould League:

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Tuning-in Activities

The activities on pages 2 and 3 are designed to interest students in the topic. The activities will also allow the teacher to gauge the existing knowledge and understandings the students have about this topic. The mini field guide on page 8 may help students and teachers identify some of things they discover.

Mystery Box

Aim: To introduce students to some of the parts of trees and their diversity.

Materials: Collection of tree seeds, pods, bark and flowers.

Procedure: Place collection in a 'feely box' (a box that is enclosed except for a hole through which children can put their hand)

Children reach into the box and guess what the object is and perhaps what kind of tree it comes from.

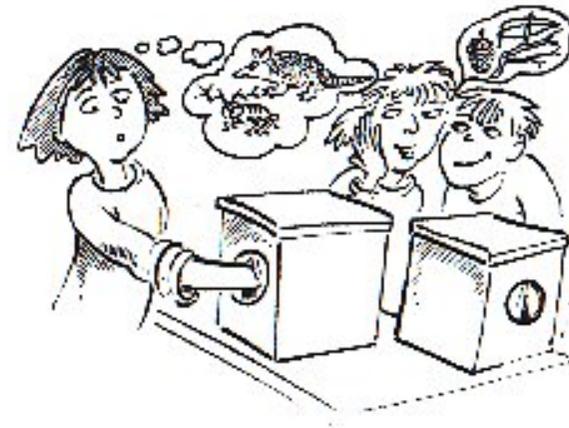
Tree Bingo

Aims: For students to familiarise themselves with parts of trees in a natural environment.

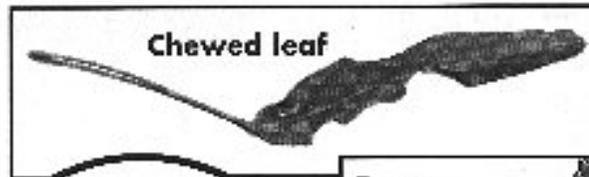
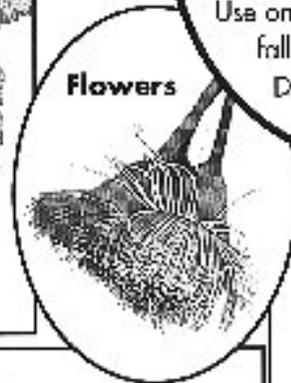
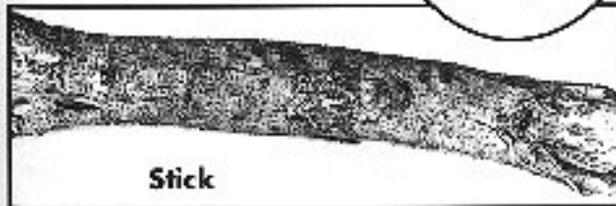
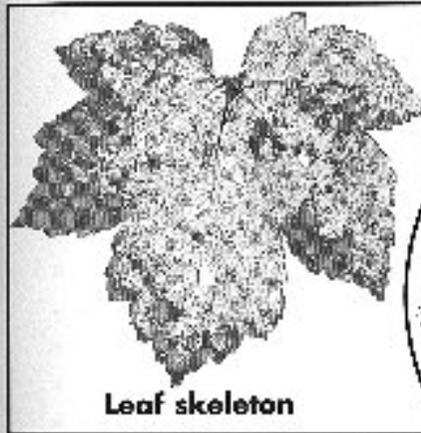
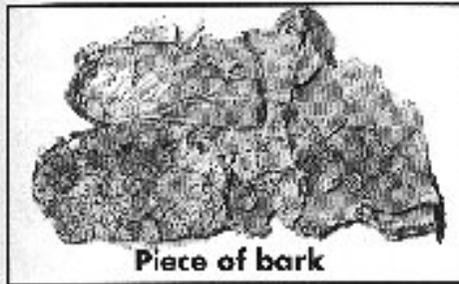
For students to identify parts of trees.

Materials: Photocopies of tree Bingo Sheet on page 7 enlarged to A3.

Procedure: This activity should take place in an area where there is a good variety of trees. Pairs of students are given Bingo Sheets. The first pair to find all the objects on the sheet are the winners.

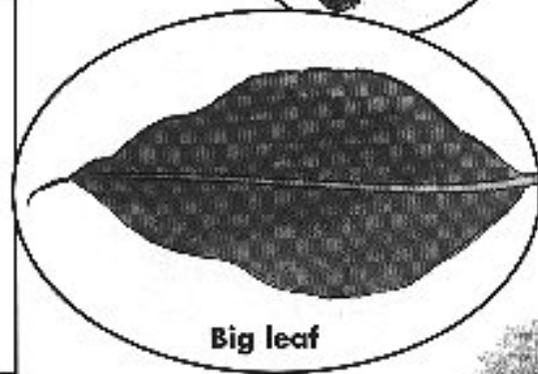
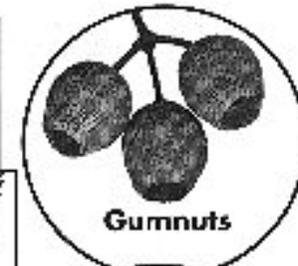
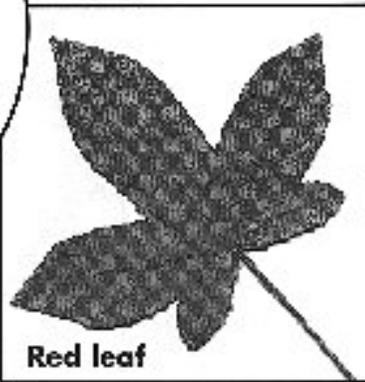


TREE BINGO



Find each of these objects and place them on the sheet.
The first group to find all the objects wins.

RULES
Use only materials that have fallen on the ground.
Do not pick things from trees.



Leaf Activities



Leaf Shapes

Find as many different kinds of leaves that have fallen on the ground as you can. Make a collection for the classroom. You may wish to paste them onto a large piece of cardboard for display or stuck them to the window. Use the mini field guide to find the names of some of them.

Sorting Leaves

Try sorting your leaf collection by shape, colour and size. Use the Mini Field Guide to help you name some of the leaves.

Chewed Leaves

Look at the leaves of the trees. Do any of the leaves seem to be chewed or eaten?

Leaves need water.

Cut two small twigs with leaves from a tree or bush in your school ground. Put one twig in a jar of water as if it were a flower and leave the other on the table.

What happens?

Why?

Leaves need light

Obtain two similar pot plants. Place one pot plant in a dark cupboard for two weeks and leave the other on the window sill.

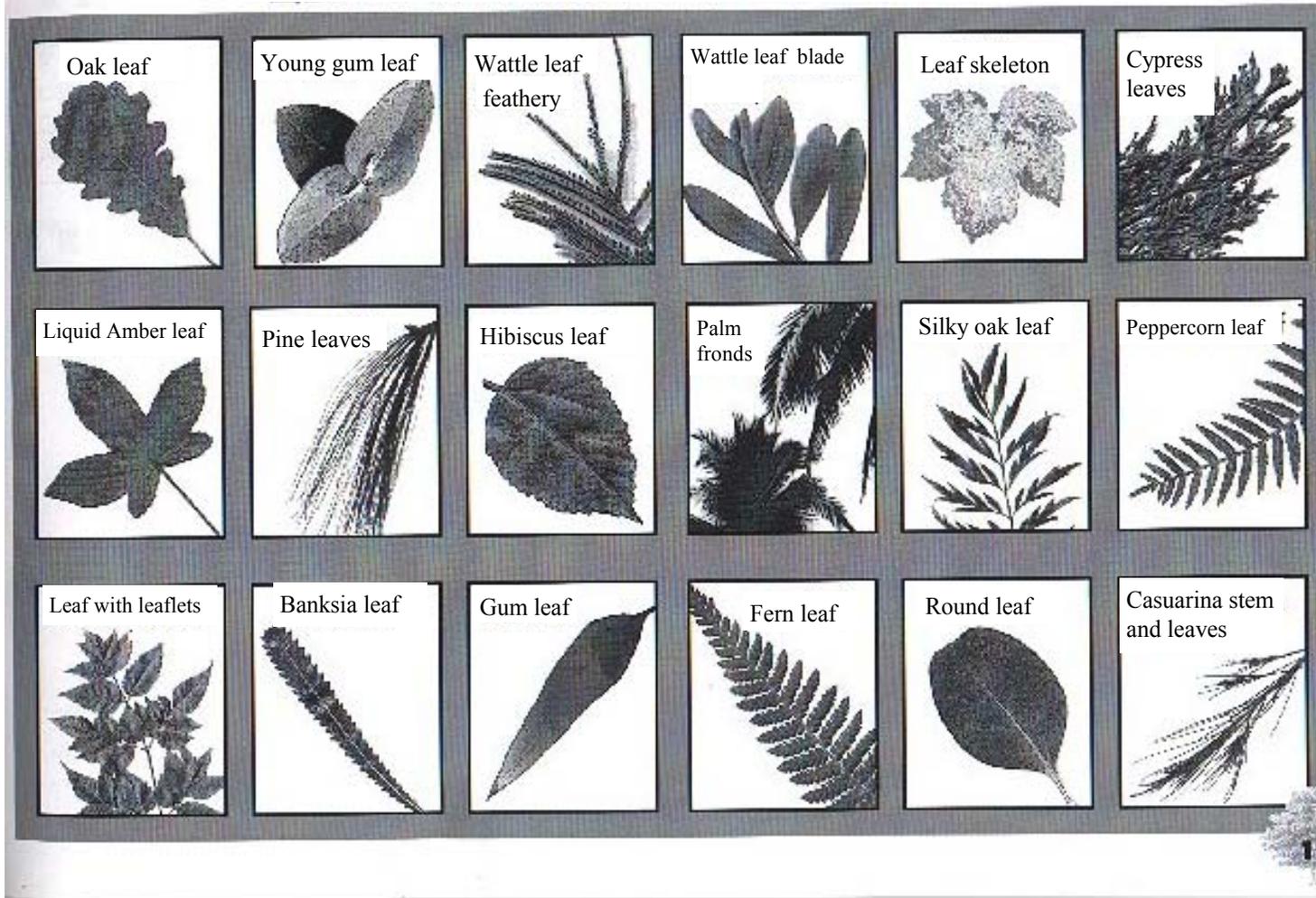
What happens to the colour?

What happens to the growth?

Leaves have veins.

Search for skeletonised leaves. See who can find the best ones. Discuss with the class what the veins might be for.

Leaf Field Mini Guide



Seeds Fruits and Seed Pods



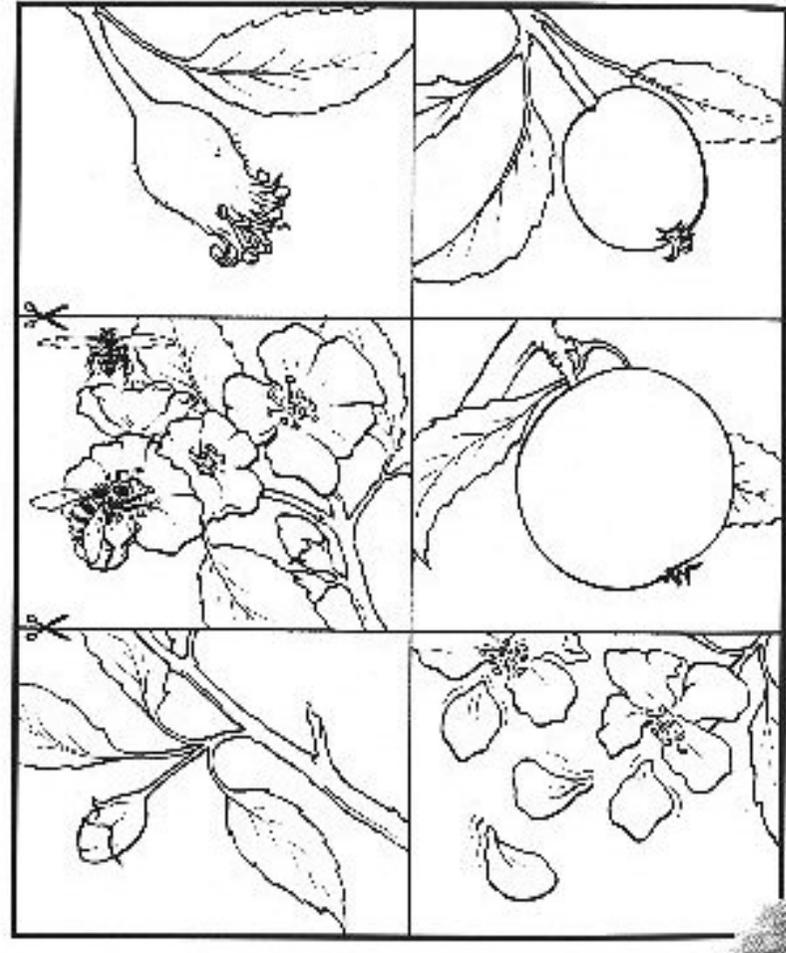
Once a flower has been fertilised the flower parts will wither and a seed or seeds will begin to develop. Most tree seed will begin to develop. Most tree seeds have some way of being carried away from their tree, so they can find a new place to grow where there is more room. The seed may be enclosed in a pod, nuts or fruits or may be designed to blow away in the wind. Fruits are designed so that animals will eat them and carry the seed in their digestive system to another place. Some plants produce a lot of very tiny seeds, other produce fewer larger seeds. Coconuts are huge seeds.

How does a flower become a fruit?

Aim: To find out how a flower becomes a fruit

Materials: Photocopies of the pictures on this page.

Procedure: Students colour in the pictures, cut boxes out and place in correct order



Seed Activities



One of the most incredible things about trees is how huge they can grow from a very tiny seed.

Try growing some trees from seed

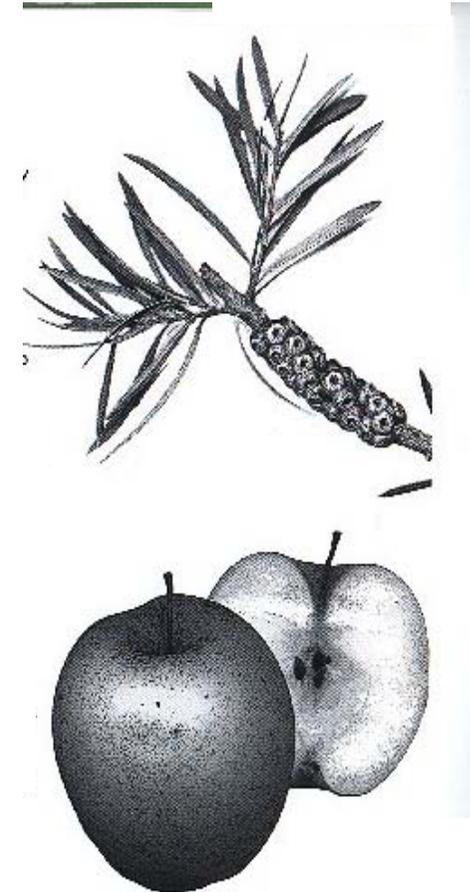
1. Pick some dry gumnuts or bottle brush seed-pods.
2. Put the pods in separate paper bags and hang them somewhere dry for about two weeks.
3. When the pods dry, the seeds will be released and these tiny seeds can be sprinkled onto clean, new seed raising mix in a pot or tray and watered every second day. Within a few weeks some tiny tree seedlings should sprout.

Try looking for some different kinds of seed pods using the mini field guide. How might different kinds of seeds be spread?

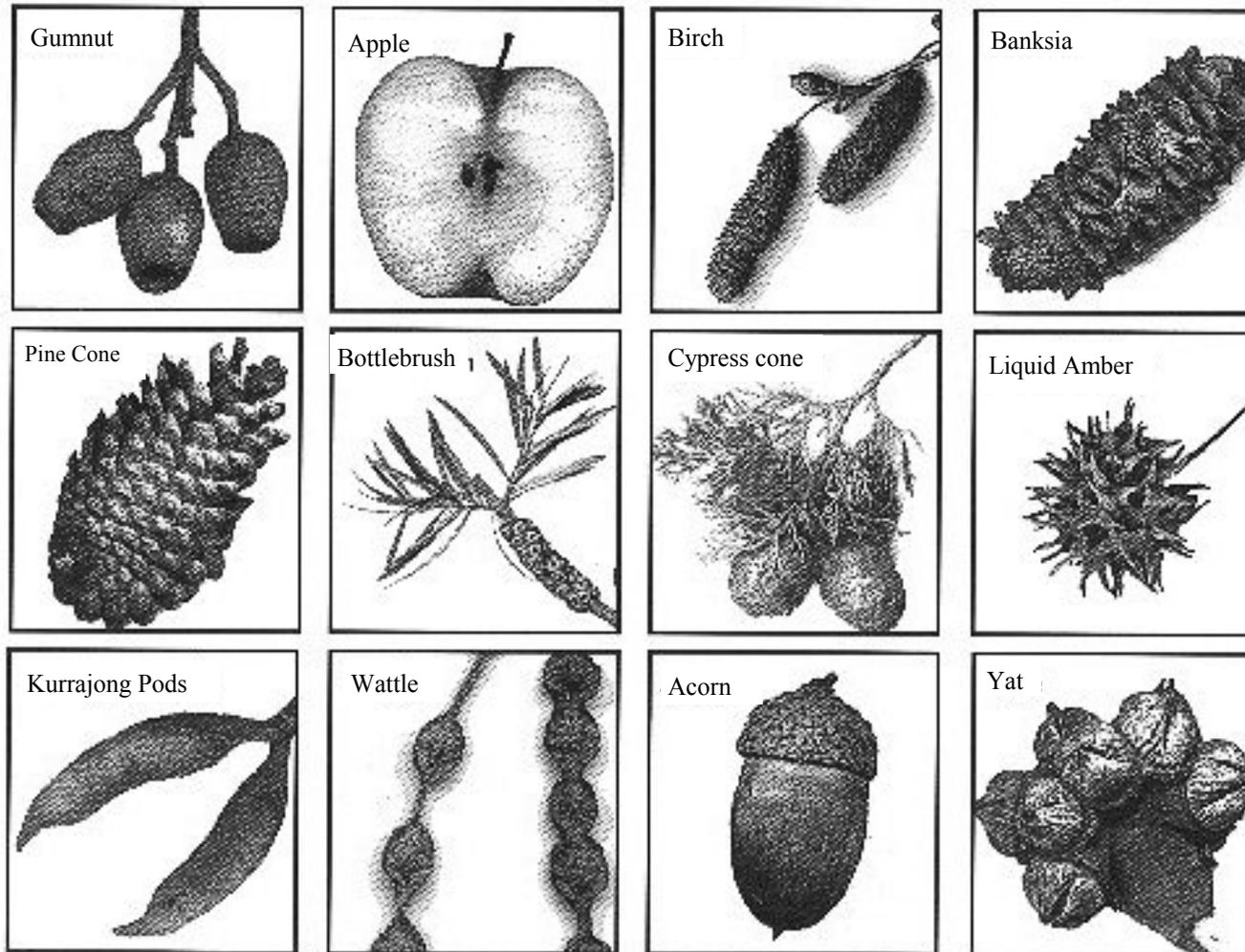
Sort some seed pods into those that are spread by wind, animals or other ways.

Try growing trees from fruit

Try germinating some seeds from over-ripe plums, apples, apricots, avocados or other fruits by burying them under 2 cm of seed raising mixtures and watering them regularly. The seedlings you grow may not be the same as their parents and may need grafting to other root stock to grow in a healthy way. The idea is not to produce fruit trees from the garden but to show that fruits carry seeds.



Seeds, pods & fruits mini field guide

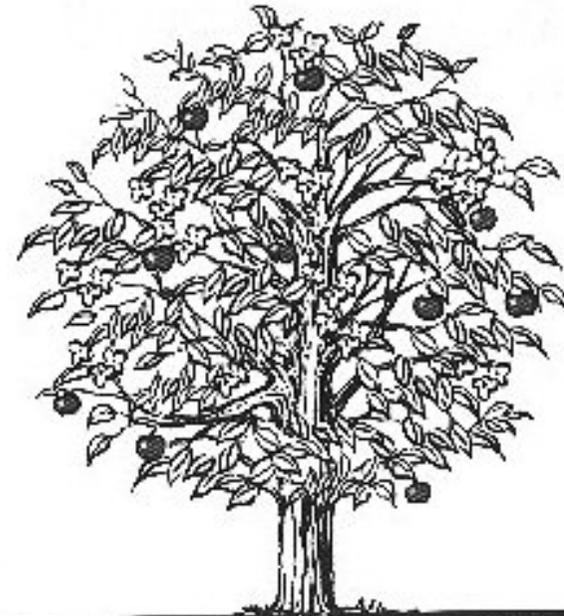


Parts of a Plant



Connect the words to the parts of the plant

Leaves
Fruits
Flowers
Branches
Twigs
Bark
Trunk
Roots
Tap Root



Fill in the missing words

The roots of plants collect.....and
from the soil.

Tree trunks are covered by

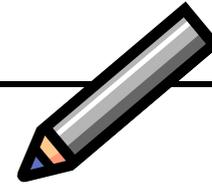
The inside of a tree trunk is made of.....

The leaves are the colour

.....

The leaves can make.....from sunlight
and air.

Sensing a Tree



Aim: To encourage students to use their five senses to explore a tree.

Materials: Copies of the activity sheet on this page for each group.

Procedure: Our senses help us to interpret the world and bring us pleasure. Introduce students to their senses

Sight tells us about colour and shape, and in most cases recognises an object for us.

Sound tells us about the tone and loudness of noise and recognises voices. It can tell us how far away things are and tells us about things we cannot see. Listen for breezes, falling leaves and animals in trees.

Smells can affect how we feel about something and tell us whether foods may be edible. Many animals have a much better sense of smell than we do. Smell bark, leaves, flowers and roots.

Touch is a very important sense that we don't use enough. Trees offer an amazing range of touch sensations.

Taste is another of our senses. But students should avoid taste plants or fruit as they may be poisonous

Provide students with the activity sheet and have them record their experiences. A class chart could be made to pool all the words used by students.

Sensing a tree

What can I see about a tree?

Make a list of things you can see.....

.....

What are the sounds from all around?

I can hear these sounds from the tree.....

Let me tell what I can smell.

The tree smells like.....

You can never touch a tree too much.

The tree feels

Never taste any parts of a tree. It may be poisonous to humans.

Name a creature that likes to eat part of a tree.....

.....

What are the most interesting parts of a tree?

.....

.....

.....

.....

Measuring Trees



This activity will need to be carried out in an area where there is plenty of room between trees for example in a grassy park where trees are well spread or where a large lawn or oval lies next to a row of trees.

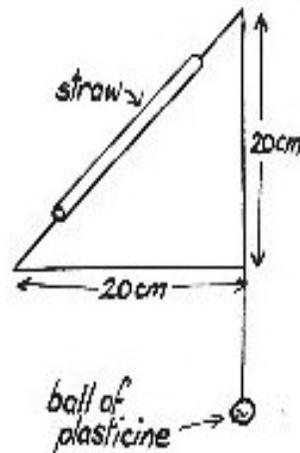
Aim to measure the height of trees.

- ◆ Materials:
- ◆ Stiff card
- ◆ Long measuring tape
- ◆ A set square
- ◆ Tape
- ◆ Clay or plasticine
- ◆ String
- ◆ Drinking straw
- ◆ Copies of instructions on this page

Procedure

The set square can be used to mark out a right angle triangle with two equal sides 20 cm long.

Cut out the triangle. Cut the straw to 10 cm long and tape it to the longest side of the triangle. Tape a 30cm piece of string to one of the 45° angled points and fix a ball of plasticine or clay to the other end of the string.



To gauge the height of the tree, look through the straw to the top of the tree and have your partner check the position of the string.

Walk back and forth until the string hangs in line with the side of the triangle, and you can see the top of the tree through the straw.

When this happens the distance you are away from the tree, plus the height of your eye from the ground, is the height of the tree.

