

# SEEDS TO TREES

## 5-14 NATIONAL GUIDELINES –

### Environmental Studies: Science

#### PUPIL ACTIVITY SHEET

#### GROWING HEALTHY TREES

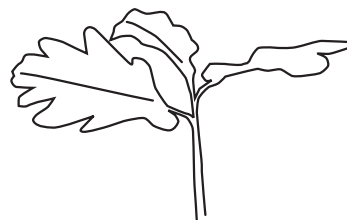
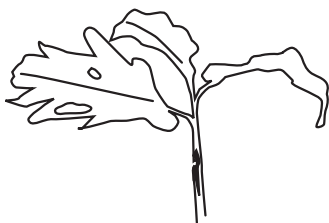
**Did you know that Scotland’s native trees are just very large flowering plants? They all grow from seeds, and when they are very young we call them tree saplings. As with children, tree saplings need particular care to grow into healthy adult trees.**

All flowering plants have **three** important parts that need looking after, for healthy growth.

**1. Leaves** – used to trap and convert sunlight energy into sugars to feed the plant. They need to be healthy. Look at the two pictures below and tick the one that you think is healthy.



**2. Stem/Trunk** – inside the stem are tubes that take the water and food up and down between the roots of the tree and the leaves. If the bark, or the stem, is damaged, the tubes are crushed and the tree can’t grow properly. That’s why you need to take care when you change the pot, or move your sapling. Look at the two pictures below and tick the one that you think is healthy.



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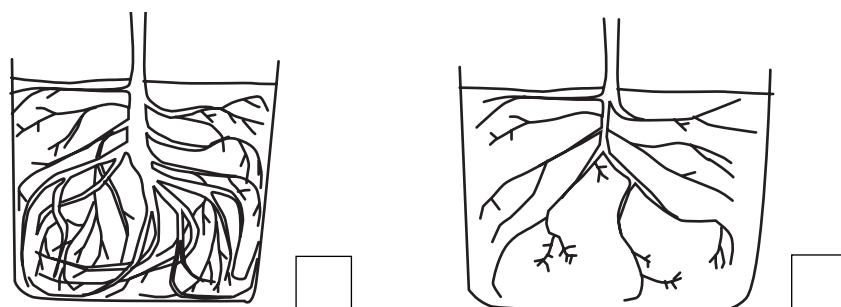
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**3. Roots** – the tiny root hairs on the roots absorb water and nutrients (food ingredients) from the compost/soil. If they are damaged or squashed up, or competing with other plant roots, the tree cannot grow properly. Tick the picture below that shows the pot that is best for your sapling to grow in.



**Task 1: Remembering all the things above, about planting a tree, draw a picture of a healthy tree sapling – with its leaves, stem and roots. Draw your picture on a large piece of paper.**

**If a tree sapling is planted outside, there are other things it needs protection from:**

**1. Wind** – a strong wind can blow a sapling over, and break its stem. A tree stake can be used to keep it upright and make sure that it doesn't get blown over. Does it matter where you put the stake around the sapling?

**2. Animals** – if a tree is planted in a place where rabbits, hare or deer live, they may eat it! You need something called a 'rabbit guard' that looks like a tube of plastic or netting. This will help to protect the trees delicate shoots from being nibbled.

**How can the plastic tube be held in place?**

**3. Weeds** – if a tree is planted in good soil other plants will grow up around it, and compete for nutrients and water. You can help by, either, weeding your sapling by hand regularly, and/or using a 'mulch mat' – a piece of carpet (not foam backed), thick layer of grass cuttings, or newspaper (must let water through).

Finally, if you plant a tree in your school grounds, it will need special help during dry weather, every day. What do you think this might be?

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**Task 2: Remembering all the things above – about caring for a tree, add to your drawing, of a healthy tree sapling:**

- horizontal line where the soil level should be between the roots and the stem
- wooden stake with ties around the stem
- ‘mulch mat’ on the soil
- two other things that will make your tree sapling grow well