How to use this lesson

Use this page to get an idea of what the lesson covers... then scroll down for activities & worksheets when you're ready to teach!

Part One: Different types of plant

Use this lesson plan to prompt discussion of some examples of different vegetable plants and how they grow.

- Climbing beans climb up supports by wrapping their stems around as they grow. They do this to reach the sunlight. Gardeners can build supports for climbing plants to help them grow making wigwams out of bamboo canes are a good way of doing this (see part 3).

- Most tomato plants grow very tall. These also need support to stop them from falling over as once the tomatoes grow they get a bit too heavy for the stem to support them. Stems can be loosely tied to a vertical bamboo stick as they grow to help this.

- Vegetables that grow underground include: potatoes, carrots, parsnips, beetroot, turnips, swede & onions.

Part Two: Soil quality

- Introduce different types of soil, as this is important for different plant types. In its simplest form, soil can either be stony and lumpy or crumbly and fine. The ideal for growing plants, particularly vegetables that grow underground, is crumbly and fine soil: it is easier for the plant to put its roots into the soil and access nutrients and water, and it prevents carrots and parsnips from growing around large stones and looking deformed.Have a look at the soil in your own garden...what type is it?

- The texture of soil can be improved by digging and raking, removing large stones, and making sure there are plenty of worms that will naturally munch through the soil and improve its texture.

Part Three: Activities to do in your plot

Get the children involved with any of the following activities...

- Prepare beds (dig over and remove weeds), pots (fill with compost) and growbags (cut the holes in the top)

- Make bamboo cane wigwams for the climbing beans following the diagram on the worksheet.

- Get bamboo canes ready to stick in the ground for tomato plants

Lesson 2 Make your bed!

LESSON 2

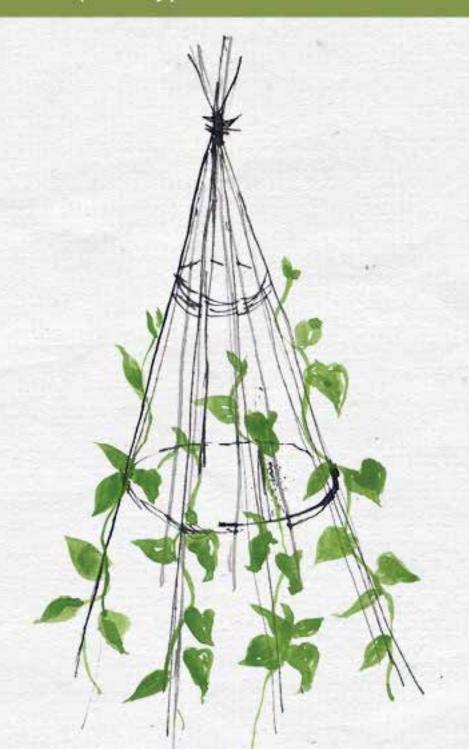
L.O: To explore the needs of different plant types



This is how a climbing bean grows.

It wraps itself around the supports so that it can reach higher.

Why do you think it tries to grow so tall?

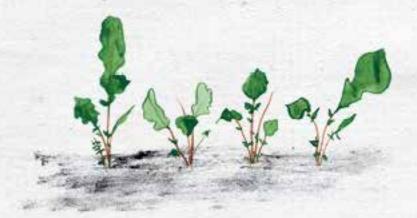




A tomato plant grows really tall.

Most gardeners tie the stem to a bamboo cane as they grow. Why do you think they do this?

Some vegetable plants grow mostly under the ground. Can you think of any examples?





Here are two different textures of soil



Stony & Lumpy

Crumbly & Fine

Why do you think that the texture of the soil is so important for these vegetable plants?



You don't want a carrot that looks like a pair of trousers!



Funny shaped vegetables can be made because lumps and stones get in the way.

How do you think the texture of soil can be improved? (The pictures might help you!)

-Can I help?

How to build a wigwam for climbing beans

You will need:

- 5 bamboo canes measuring
 1.5m long
 - Twine or string
 - Scissors

Instructions:



 Put one bamboo cane into the soil so that it stands upright without falling over.



3. Tie the tops of the canes together using some string. You might need to ask an adult to help you.

Before you start:

Decide where you will grow your beans and make sure the soil is nice and loose.



2. Now, put all the other 4 canes into the soil so that it makes a circular shape. The circle needs to be about 60cm wide, and the canes should be spaced out evenly.



4. Tie a bit of string around the middle of the wigwam. Do this by tying a knot around the first bamboo cane. Then take the string to the next cane and tie another knot around it.Repeat this until you've gone all the way around the wigwam. This will give it more support.