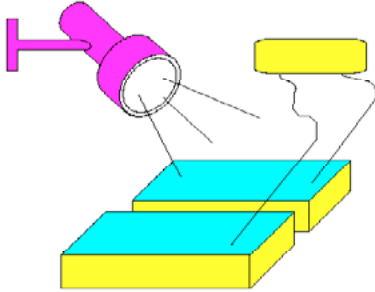


# Using IT in... plants

## Are some soils warmer than others?

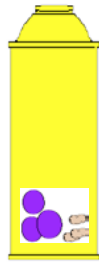
Different soils can hold heat better than others and this affects the growth of plants. You put trays with sand and soil under a desk lamp. You then use **temperature sensors** to measure the temperatures showing this as a graph on screen. Later you can remove the lamp and ask: Which soil heats up faster? Which soil cools down faster? How could this be important to plants?



IT: Measuring

## Do seeds have energy?

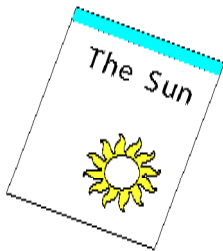
Growing seeds give out heat and if you put beans on wet cotton wool in a vacuum flask you will be able to measure a temperature change as they grow. You can place a **temperature sensor** in the flask and the computer will record the temperature over a day or so. You can look at the graph on the screen and ask: is there a change in temperature? Where does the heat come from? Do you think other seeds release energy? Why do you think animals eat seeds?



IT: Measuring

## What would happen if the sun went out?

The children can use a **word processor** to write a story about the importance of the sun. They write about how cold it would get, or tell how plants would die and how animals depend upon plants for food.

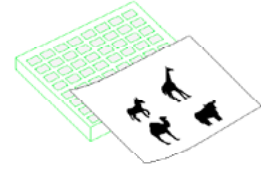


IT: Communicating

## How are fruits different?

You can give the children some picture books or a bowl of fruit and ask them to describe each fruit. They can work together at a **word processor** and develop their descriptions.

Using a 'Clicker' grid you can provide them with a computer word bank - such that, when they press on the overlay, words are typed into their work. You can also get the children to create a **database** of fruits and develop their skills of recording and analysing information. They can answer questions such as: do all fruits have pips? What is the most common colour of fruits? Which fruits have furry skin? Which fruits have a stone?



IT: Handling information

## Do plants give off water?

Plants lose water from their leaves (transpiration) and this is how they draw nutrients from the soil. Using a **humidity sensor** you can monitor this happening - you place plant in a polythene bag and use the sensor to measure the humidity around it.

IT: Measuring

## How different are leaves from the same tree?

Leaves from the same tree can be a range of sizes. The children collect 30 leaves from a single tree and measure their length, width or number of prickles or lobes. A computer **database** or **spreadsheet** program can help them to record and analyse their findings. They might draw a count graph and answer: is there a 'usual' size for a leaf? Are other leaves larger or are they smaller? Older children can look for patterns in the data. They might draw a scattergraph of holly



The best size for a leaf			
Leaf number	Leaf width	Leaf length	Prickles
1			
2			
3			

leaf length against the number of prickles asking: do larger leaves have more prickles?

IT: Handling information