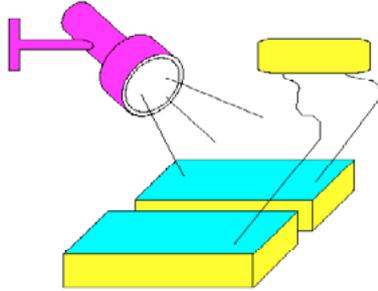


Using IT in... plants

Are some soils warmer than others?

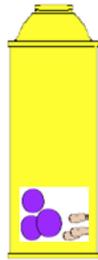
Different soils can hold heat better than others and this affects the growth of plants. You put trays with sand and soil under a desk lamp. You then use **temperature sensors** to measure the temperatures showing this as a graph on screen. Later you can remove the lamp and ask: Which soil heats up faster?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



IT: Measuring

Do seeds have energy?

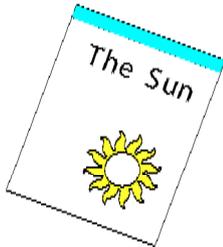
Growing seeds give out heat and if you put beans on wet cotton wool in a vacuum flask you will be able to measure a temperature change as they grow. You can place a **temperature sensor** in the flask and the computer will record the temperature over a day or so. You can look at the graph on the screen 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