



Nourishment

Plant roots grow down to get liquid food from the soil.

Plants make their own food from the world around them. They make the food in their leaves. One important source of **NOURISHMENT** is the soil the plant is growing in (Picture 1).

The problem for a plant is how to get the nourishment from the soil to their leaves. The way they do this is to suck up the nourishment in the water found in damp soil.

We can't easily see roots sucking water and nourishment from the soil, but we can see how they move through the plant by using coloured water and a celery plant

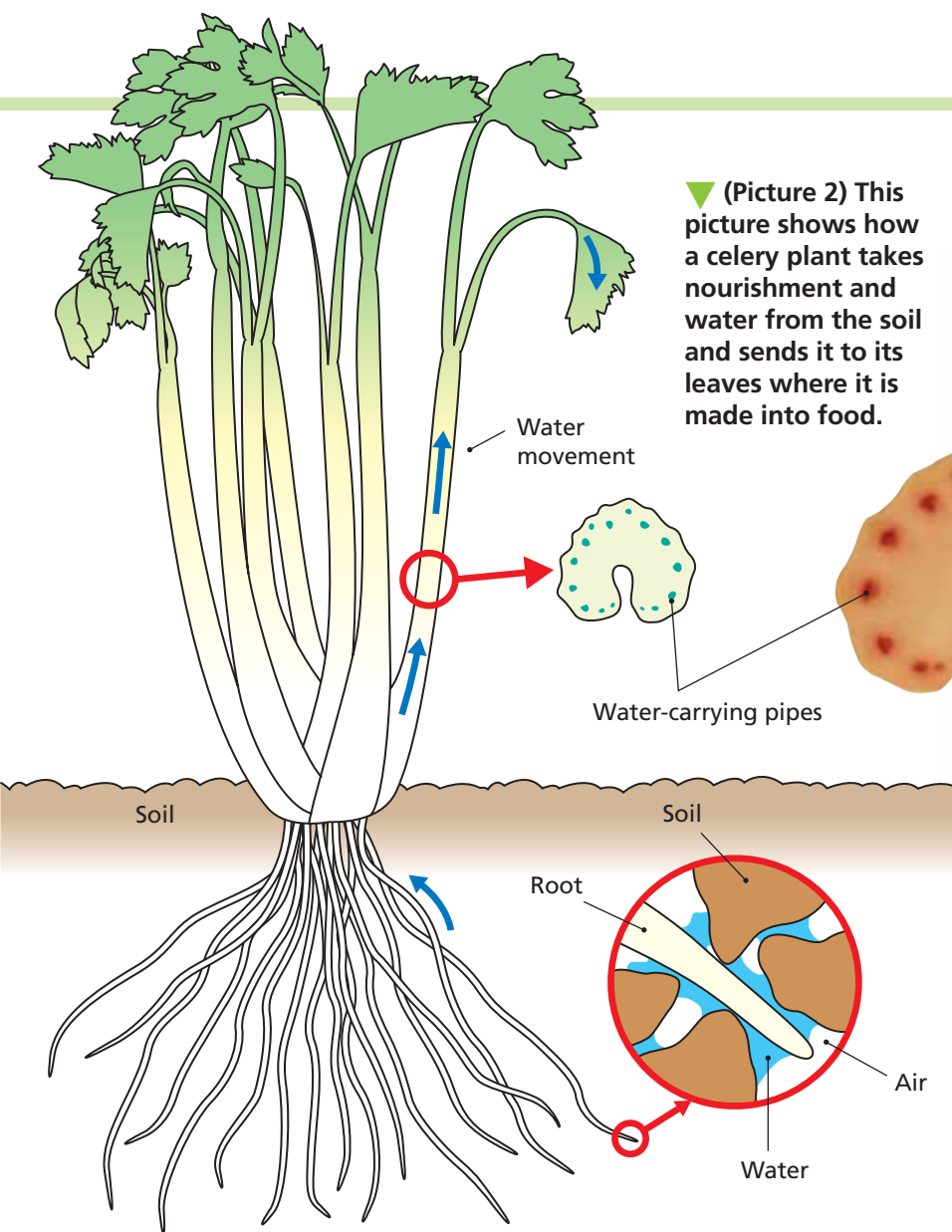
(Pictures 2 and 3). We use celery because it has big water-carrying pipes that are easy to see.

Where the nourishment comes from

Most of the nourishment a plant needs comes from the rotting of dead plants on the soil surface. This rotted material is called **HUMUS**.

▼ (Picture 1) Look carefully at some soil and you will see masses of tiny roots reaching out to get moisture and nourishment.





▼ (Picture 2) This picture shows how a celery plant takes nourishment and water from the soil and sends it to its leaves where it is made into food.



▲ (Picture 3) You can look at a celery plant to see how nourishment gets from the roots of a plant to its leaves. Here, the celery has been placed in a dye, then a stalk has been cut through. You can very easily see the pipes in the celery that carry the water.

Gardeners make humus by rotting down their old plants. They do this in a special pile called a compost heap. If you get some well-rotted garden compost from the bottom of a pile and squeeze it, liquid plant food will come dripping out. It's just what the plants need.

Pot plants are not given this kind of nourishment because people don't want smelly compost in their homes. This is why they feed them with liquid food. It is called **FERTILISER**.

When plants have too little food

If plants do not get enough food, they grow slowly or poorly. They may look weak and stunted. If just one part of their food is missing, they may not produce good fruit, their flowers may be small, or their leaves may turn a funny colour. When plants are weak they are more likely to get a disease.

Summary

- Nourishment comes from the soil.
- A natural source of nourishment is called humus.
- A source of liquid nourishment is called fertiliser.