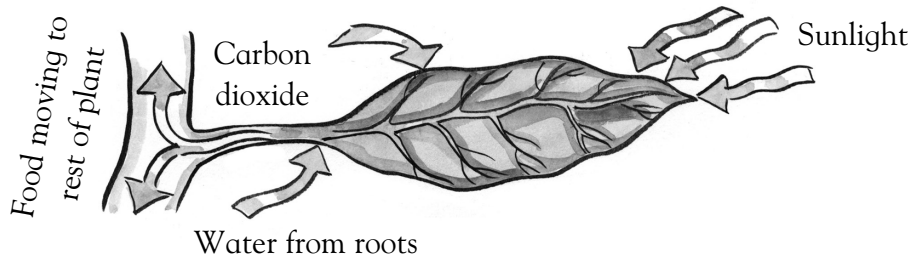


The plant food factory



Background knowledge

A plant needs sunlight, carbon dioxide, and water to make food. A green substance in plants called *chlorophyll* traps the energy from the Sun needed to make food. Chlorophyll is mostly found in the leaves of a plant. The leaf can be thought of as a food factory. Leaves of plants vary in shape and size, but they are always the plant organ best suited to capture solar energy. Once the food is made in the leaf, it is transported to the other parts of the plant such as the stem and roots.



Science activity

Kenny found a plant that had been put in a cabinet by accident. It looked very unhealthy. Some of its leaves were yellow and drooping, and others had fallen off. Kenny decided to put the plant on the windowsill to see if it would revive.

What else will Kenny need to do to help the plant recover?

.....
.....

What do you predict would happen after several days? Give reasons for your ideas.

.....

Science investigation

Obtain a geranium plant. Design and conduct an experiment to see what happens to a leaf when it does not get sunlight. One suggestion is to fold some black paper over one of the leaves. Make sure to place the plant near the sunlight and water it when the soil becomes dry. Predict what you think will happen.

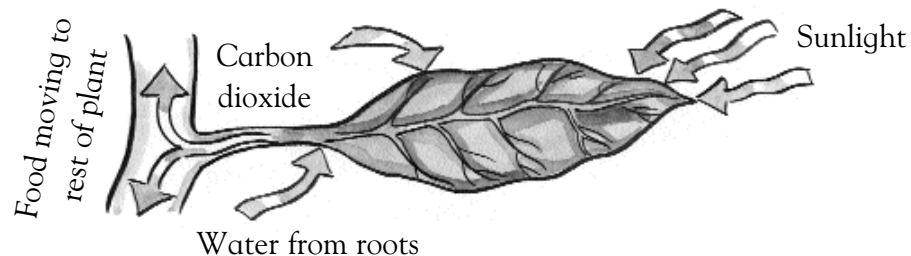


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What else will Kenny need to do to help the plant recover?

Kenny should place the plant in sunlight and water the plant.

What do you predict would happen after several days? Give reasons for your ideas.

The plant will become more rigid. The plant will also turn greener as it produces chlorophyll again.

Science investigation

The part of the plant that was covered with black paper will no longer produce chlorophyll and so will appear whitish in color. Plants need chlorophyll to make food and need sunlight to make chlorophyll. Without chlorophyll, they will die.

