

Plant experiments (All 7)

Experiment 1: Do plants need light to grow?

Materials:

- Potted plant
- Tinfoil

Step 1

Place the potted plant in a sunny place.

Step 2

Cover one of the leaves completely with tinfoil to shield it from the light.

Step 3

Leave for two weeks. Remove the tinfoil. Compare the leaf with the uncovered leaves.

Activity: To show the effect of light on plant growth.

Materials:

- Cotton wool
- 3 Plastic cups
- Water
- Watercress seeds
- 2 Cardboard boxes

Step 1

Put a layer of cotton wool at the bottom of each of the cups.

Step 2

Add a little water to all 3 cups.

Step 3

Sprinkle the watercress seeds evenly over the cotton wool.

Step 4

Put 1st cup in a sunny place, and the 2nd cup under a cardboard box.

Step 5

Cut out several holes of the other cardboard box and place the 3rd cups under this box.

Step 6

Leave for several days and check daily that the cotton wool is still damp.

Observe and compare the growth of the 3 cups.

Explanation:

The seeds exposed to light should grow straight up. The seeds covered by the box with the hole in the side will have grown towards the hole, looking for the light. This is called phototropism. The seeds in the box with no light will be the smallest and less green. This activity shows the effect of light on plant growth.

Further idea: Repeat the process again, but in this case, cover one of the cups with a glass jar. This makes a 'green house'. Compare the growing of the seeds in the green house and those growing freely.