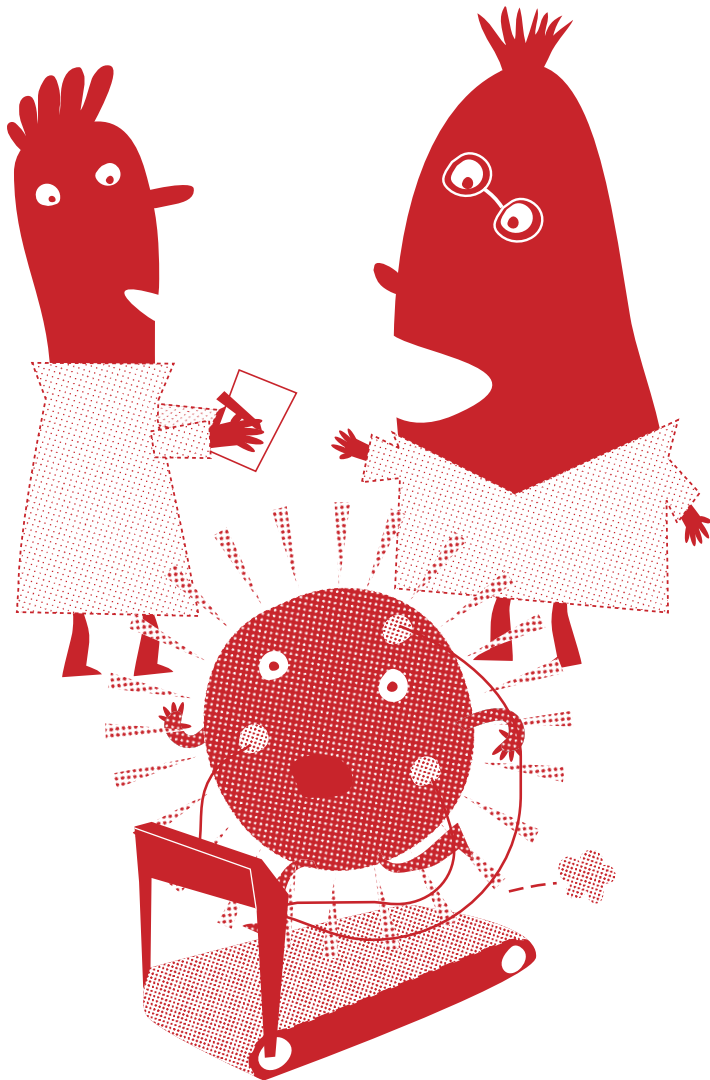


Test the effect of light energy

Concept—Light is a form of energy, plants need light to grow



CURRICULUM LINK:

Science Curriculum—Living Things and Energy and Forces strand
Geography Curriculum—Natural Environments strand

Experiment

You will need:

- Cotton wool
- Bean or wheat seeds
- Three jam jar lids
- Two small cardboard boxes

1. Place cotton wool in each of the three lids.
2. Plant several seeds in each lid.
3. Place all lids where there is plenty of light.
4. Add enough water each day so that the cotton wool in each lid stays moist.
5. Once the plants have grown about 5cm tall leave one lid in plenty of light.
6. Put the second lid in a small cardboard box that does not let any light in.
7. Put the third lid in a small cardboard box with a small hole (about the size of a pencil) in one side.
8. Remember to water the plants each day.
9. After a week observe how the plants have grown.

Plants need light energy (from the sun) to make food for growth using a process called photosynthesis. In the box with the hole in it, the plants grow towards the hole—towards the light. Growth towards light is called phototropism.

All our energy comes from the sun. It shone on trees and other plants millions of years ago. These died and decayed into coal, oil and gas. Today the sun shines on crops and grass, which provide food for humans and animals. The sun also causes weather patterns: the sun warms the air and causes it to rise, forming air currents or wind; the sun dries up water, which turns into clouds and falls to the ground as rain, causing the rivers to flow.