AGES 6–8 · TEACHER PAGE

Light or dark?

A simple, fair test: two identical seed trays, one in the light and one in the dark.



2 sessions of 30 min, observations over 10 days | MAVA : HYDRO SLIM

KEY QUESTION **Can a plant grow without light?**

OBJECTIVES

1. Run a fair test in which only one thing changes.
2. Predict, observe, compare.
3. Conclude that plants need light to stay green and strong.

MATERIALS

- Two trays with rockwool cubes, or two cups
- Cress or radish seeds
- A cupboard or a large box
- Ruler, pupil sheet

CURRICULUM LINKS

NGSS	**2-LS2-1**: Plan and conduct an investigation to determine if plants need sunlight and water to grow.
NATIONAL CURRICULUM	**Year 2 · Plants**: water, light, temperature; **Working scientifically**: comparative and fair tests.
IB PYP	**How the world works**

LESSON STEPS

1 **Predict** 10 min	'Where should we put our seeds?' Each pupil circles a prediction on the sheet.
2 **Set up** 20 min	Same seeds, same water, same temperature. Tray A by the window, tray B in the cupboard: only the light changes.
3 **Observe** 5 min / 2 days	Measure the height, note the colour. In the dark, shoots sprout but grow long, thin and yellow: they are searching for light.
4 **Conclude** 20 min	Without light, the plant uses up its food store. Put tray B back in the light: it turns green in a day or two. Where should our MAVA go?

ASSESS

The pupil explains why we change only one thing at a time and states a conclusion.

VOCABULARY

investigation, prediction, light, dark, compare, conclude

EXTENSION

Run the same test with water: one tray watered, the other not.

AGES 6–8 · PUPIL SHEET

Light or dark?

NAME _____ CLASS _____ DATE _____

Tray A : by the window **Tray B** : in the cupboard Same seeds, same water, same temperature.

1 My prediction: circle one sentence.

Tray A grows better.	Tray B grows better.	Both grow the same.

2 Every two days, measure and note the colour.

Day	Tray A · height (mm)	Tray A · colour	Tray B · height (mm)	Tray B · colour
Day 2				
Day 4				
Day 6				
Day 8				
Day 10				

3 On day 10, draw both trays.

TRAY A

TRAY B

4 Complete the conclusion.

Without light, plants become _____ and _____. Plants need _____ to stay green and strong.