

Science

For Grade 5-6

Purpose:

- To help children understand watering the right amount, and not waste. Every drop counts.
- to help children record data and manipulate with instruments.
- help with their **main lesson : plants.**

Plan

- Structure of plants(stem,leaves, roots)
- How plants grow(water)?
- Importance of plants.
- Planting a tree
- homework: planting a tree

Step 1: setting it up

Use the instructables

<https://www.instructables.com/id/Soil-Moisture-Sensor/> to build the project.

- If LED is not available, try reading data with the arduino software serial monitor.



sensor

To circuit(arduino)
Instructable.

Step 2: the plant

Collect soil (dry if possible) from the school compound and plant a small plant in it(a sprout).
Or use existing plant in the school.
Then water carefully after following the next step.



Step 3; using it

Place the hygrometer sensor in the soil and measure the moisture level using the data sheet below.

Everyday; repeat this and water carefully. This teaches the student to water the right amount, no watage.

The teacher can set the right ammount.

Measure the plant height and record progress.

Led 1

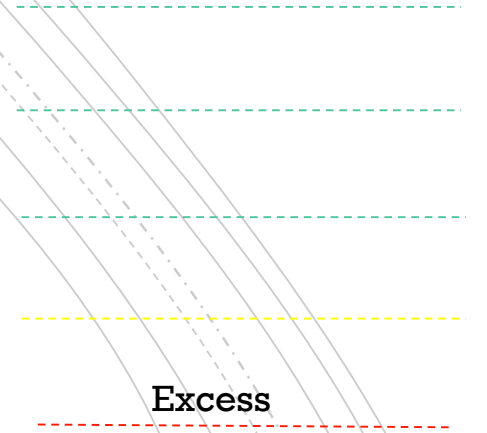
Led 2

Led 3

Led 4

Led 5

Water ammount



Classwork

DRAWING and LABELLING a plant



Functions of a tree:
