Student-led experiment: soil drainage and the importance of water

In this experiment, you will plant quick-growing seeds in different soil types. The aim of the experiment is to see which types of soil best support healthy plant growth.

Note: This experiment is to be placed in a suitable environment in the classroom where your seeds can grow and be observed over a period of time.

Each pair of students will need the following:

- an egg carton
- soil
- a mix of soil and clay
- seeds (these are up to you, but quick-growing seeds are best for this experiment - wheat, sunflower, cress or chives will be quick, cheap, easy to access and easy to grow)
- access to water.

Instructions:

1. Put soil into half of the egg carton and a mixture of soil and clay into the other half. Label each soil type clearly.

2. You are then to put seeds into the soil in each of the different sections.

3. You then need to decide which sections are to be:

- overwatered
- watered
- not watered.

Ensure that each soil type is subject to the same water regime (e.g. one section of soil should be overwatered, one should be watered, and one not watered. The same should be done for the soil and clay mix).

Clearly label each of these sections in your egg carton so that the experiment can be continued as the unit progresses. In addition, make sure you have your names on your carton.

Don't forget to do your initial watering and continue throughout the unit!

4. You are to take initial notes on the experiment and predict what you think will happen to the seeds in each area with its different soil and watering treatments.