Observe plant growth and collect evidence of nutrient activity

In this experiment you will be growing seedlings. Some seedlings will get water, some will get water with added nutrients. You will be observing the differences in the seedlings' growth over four weeks.

Materials

You can use New World Little Garden pots if you have them.

1. Two 500 ml plastic plant pots with bases.
2. Enough sphagnum moss to fill the plant pots
3. 4 bean seeds
4. Concentrated liquid plant food.
5. 1 litre measuring jug
6. 40ml measuring cup (for measuring liquid plant food).

Method

Fill two plastic pots with sphagnum moss and then plant two seeds per pot about 3 centimetres deep into the moss.

Make sure each pot sits on its base to catch any liquid that drains out.

Label both pots with your name and also indicate on the label which plant will receive just water and which will receive liquid plant food (nutrients) diluted in water.

Put all the pots in a sunny spot in the classroom.

Every second day for 4 weeks water one pot with just water and the other pot water with liquid plant food, diluted according to the instructions on the bottle.

Give each plant the same amount of liquid each time. The amount of water given to the water only treatment should be the same volume as the diluted liquid plant food which is given to the water plus nutrients treatment.

In the beginning the seeds are germinating and the plants are very small. They don't need much water and nutrients. They may only need 40mls every two days. Simply keep the sphagnum moss in the container moist to touch.

As the bean plants get bigger you will have to increase the amount of liquid you provide.

Observe the plants each day. Take photographs of the plants side by side as evidence. Remember to keep the label in your photographs so you know which plants are which in the photo. It is also a good idea to put a date in each photo so you know when it was taken.

Review your findings and consider how you can publish your conclusions and evidence.