



Growing Plants - Year 1

Overview: to make observations about a range of plants as to where, how and what they need to grow (unit 1b)

Growing Plants

Aims:

- To look at a variety of different types of plants.
- To compare differences between a range of plants.
- To explore and look at plants and discover something about how they grow and their usefulness to us.

Time: 60 min

Resources:

- Plants – Banana, Sugar cane,
- Rice, Corn
- Carrots,
- Aloe vera
- Tomato & Potato
- 5 Stages of growing a plant
- 3 Goodie bags with products to match plants chosen
- Laminated words
- Guide on how to grow plant that pupils have planted

Skills:

- Verbal reasoning & Enquiry

Keywords:

- Seeds, Roots, Stem, Leaves, Flower, Fruits
- Like, Similar, Different to...
- Water, Sunlight

Cross-Curricular Subjects

- Numeracy – *Y1T3Unit 8*
- Citizenship – *Unit 1*
- Art – *Unit 2B*
- Geography – *Unit 1B*

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Teaching sequence:

- Welcome and short presentation about Syngenta and what the company does in working with plants.
- At glasshouse lobby area pupils to look at one plant and to discuss the various stages of growth: seed, roots, shoot, stem, leaves, flower and fruits. Ask pupils to volunteer in selecting a card from the from key words card pack and then to label a section of the plant.
- Take pupils on a mini tour of the glasshouse. Explaining that plants grow all around the world in different climate conditions. Ask pupils why the building is made out of glass. Re-enforcing the main points that plants need sunlight, warmth, water and some good soil to grow.
- At glasshouse lobby area pupils to look at a range of variety of interesting plants (see resources) that have come from the different growing rooms. Encourage pupils to discuss the differences of each plant and it's usefulness to us. That bananas have big leaves to produce a big fruit – banana etc.
- Divide pupils into even 3 even groups and place an adult in each group. Organise pupils within each group to explore the plants on various tables. Feel the leaves, observe the colour and different parts of the plant. Ask the adults on each table to direct each child to pull out an item from the goodie bag and to see if they can match the product with the plant. For example packet of sugar to the sugarcane plant. Pupils to understand the plants can look very different when they reach our homes. Key question to ask – *Why is it important to grow plants?*
- 3 Stars and a Wish – pupils to share 3 key learning points and make a wish.

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Teachers Notes:

- Syngenta teacher will need either Power Point presentation or laminated sheets to highlight what the company does, what kind of people work in the organisation and how do they work with plants and help them to grow. Syngenta also help farmers around the world to grow their crops so that they can grow food, flowers and other important things for us to eat and use.
- Have a key plant to demonstrate the different growing stages - seed, shoot, stem, leaves and flower – 5 displays if possible.
- Have small hand held magnifying glasses for students to look at plants in detail
- Set up all working stations. On each table have a variety of plants that the students can observe and touch. Place a 'Goodie Bag' filled with products (e.g. bag of flour, packet of sugar, toothpaste with Aloe Vera etc) relating to the plants you have selected.
- Specific parts of a plants to demonstrate to pupils what parts are useful to us (e.g. Aloe Vera leaf etc)
- Laminate some bold 'key words' relating to the plants growing stages
- Have 'newspaper' planters made up, soil and seeds so that the pupils can plant a seed. Have liquid soap available for washing hands. Big laminated board and little handouts to go with plants on how to grow a healthy plant.

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3 Wishes and a Star (Plenary)

- Pupils share 3 key learning points from the lesson and then make a wish – e.g. “ I learnt why it is important to grow plants. I learnt that plants need water to grow...sunlight etc and I wish that the next time I come to Syngenta I could spent more time touching the plants.

Extension Activities:

- Pupils to record the growth of their plant on a simple chart at school.
- Pupils to walk around school or local area to see where plants are growing – gardens, hanging baskets, in the shade, sunlight etc
- Pupils to make a picture of a plant titled ‘seed plant’ using different materials such as lentils and grains.
- Pupils to bring in either a fruit and/or a vegetable that they really like and to discuss what part of the plant they are eating e.g. carrot – root, cabbage– leaves, broccoli – flower. In small groups pupils to make a ‘plant picture’ using the different items. Teacher may need to bring in things like rhubarb, celery, leeks, etc to give ‘stem’ part of plant. Pupil then to draw their unique ‘vegetable/fruit’ plant and display in the classroom.