Plants: Seeds and Bulbs

Aim:

To observe and describe how seeds and bulbs grow into mature plants by planting seeds and bulbs.

I can plant seeds and bulbs and suggest how to care for them.

To perform simple tests by setting up a comparative test to understand what plants need to germinate and grow.

I can set up a test and make a prediction.

Success Criteria:

I can follow instructions to plant a seed and a bulb.

I can suggest how to care for a plant so it grows well.

I can set up a simple test to show what plants need to grow well.

I can predict which plants will grow well and which will not.

Key/New Words:

Seed, bulb, germinate, embryo, stem, tunic, scales, bud, sprout, compare, comparative test.

Resources:

Lesson Pack

Small plant pots - 3 per child

Soi

Paperwhite narcissus bulbs - 1 per child

Dwarf sunflower seeds - 1 per child

Fast germinating test seeds - 1 per child

See the **Adult Guidance Sheet** for information on choosing seeds and bulbs.

Preparation:

Plant Growth Prediction Activity Sheet - 1 per child

Prior Learning: It will be helpful if children have previous experience in identifying some common garden, wild and edible plants.

Learning Sequence



Seeds and Bulbs: Using the **Lesson Presentation**, introduce the children to the structure and function of seeds and bulbs. Explain that the children are going to plant one dwarf sunflower seed and one paperwhite narcissus bulb so they can compare how they grow.





What Do Plants Need to Grow? Record the children's initial ideas about what plants need to grow well. In pairs, encourage children to generate ideas about how they can find out if their suggestions are correct. Discuss these suggestions, in particular drawing out the idea that they could plant seeds and compare how they grow under different conditions.





Planting: Explain that, in addition to the sunflower seeds and narcissus bulbs, the children are going to plant some seeds to grow under different conditions. Children follow the instructions to plant one test seed, one sunflower seed and one bulb each. (To avoid getting the planted seeds and bulbs mixed up, it is recommended that the class is given one kind of seed or bulb to plant at a time. When these are planted they can be labelled and collected in before the next seed or bulb is distributed.)





Plant Growth Comparative Test: Explain the comparative test. In groups of about four, the children decide on appropriate locations and conditions for each plant (support may be required to ensure each plant is placed in an appropriate location).





Plant Growth Predictions: In their groups, children discuss their predictions for the growth of each seed. Children fill in the **Plant Growth Prediction Activity Sheet**. Following from this, children use their predictions to decide on the appropriate conditions for their sunflower seeds and narcissus bulbs.





Children fill in the Plant Growth Prediction Activity Sheet with adult support.



Encourage children to expand on their answers on the **Plant Growth Prediction Activity Sheet** by explaining the reason for their predictions.



Whole Class

Seed or Bulb? Quiz children on which of the common foods are seeds and which are bulbs.

Taskit

Dissect it: Dissect seeds and bulbs to observe the structure inside. Tulip bulbs and pre-soaked beans are good ones to try.

Growit: Grow grass seeds in small pots to watch the process of germination day by day. You can decorate the pots with funny

faces. Soon they will need a haircut!

Researchit: Find out about the fascinating history of the tulip. Did you know there are over 3000 registered varieties?

