Science

Plants

Key Question:

Do bigger seeds grow into bigger plants?

Our Knowledge Organiser

Key Learning

Year: 2 Term: Summer 2

Questions: Do bigger seeds grow into bigger plants?

Curriculum Area: Science: Plants

Background information including prior knowledge):

Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.

Identify and describe the basic structure of a variety of common flowering plants, including trees.







Key Content:

- Observe and describe how seeds and bulbs grow into mature plants.
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Key Questions

Do bigger seeds grow into bigger plants?

Do all plants need the same conditions to grow?

Are all seeds dispersed the same way?

What is the life cycle of a dandelion?



Key Vocabulary



leaf	A flat green part of a plant or flower that grows from the stem.
flower	The part of the plant that produces seeds. Every flower is different in colour, smell, shape and size.
blossom	The blossom is the flower part of any plant or tree.
fruit	A food that grows on a plant that contains seeds inside
berry	Small fruits that contain many seeds. E.g. blueberry
seed	The part of a plant which can grow into a new plant.
trunk	The main woody stem of a tree.
stem	A part of a plant that sits above ground. It allows water and nutrients flow up from the roots to the leaves.
bark	The covering of the stems of woody plants like trees.
bud	A small growth on a plant that develops into a leaf, flower or shoot.
dispersal	To spread or scatter the seeds from the original plant or flower
bulb	A plant that begins to grow underground
mature	To grow and produce flowers





Reading Starter:

Bean plant life cycle

Beans are legumes: a type of plant with double-seamed pods, containing a single row of seeds.

1. **The seed germinates**
   The plant starts life as a seed. The runner bean plant seeds are round, hard and multicoloured, usually red or purple with black spots. The seed begins to germinate and a shoot emerges, usually after about 2 to 3 days.

2. **The plant grows**
   The seedling contiues to grow above ground and a stem appears. Roots continue to grow underground. A few leaves appear on the stem of the plant, which gets thicker and stronger. Runner bean plants usually grow to around 3 metres.

3. **The plant flowers**
   The plant produces flowers. The runner bean plant usually has red petals, but they can also be white. The plant waits to be pollinated. You will begin to see flowers on the bean plant after about 6-8 weeks.

4. **The flower produces fruit**
   After the flowers are pollinated or fertilised, the bean plant priduces pods of beans, which is what we can pick and eat, usually after about 12-14 weeks. There are around 40,000 varieties of bean.

5. **The fruit releases seeds**
   The flower shrivels and seeds from some of the pods fall onto the ground and settle. The hard shell of the seed helps to protect it.

6. **The plant dies**
   The final stage is when the plant dies. The seeds that are left germinate to produce new plants and the life cycle begins again.

What type of plant are beans?

What colours are the runner bean plant seed?

When do you begin to see flowers?

How many varieties of bean are there?

What's going on?



https://explorify.wellcome.ac.uk/en/activities/whats-going-on/shooting-sprouts