



# Waterbeach Community Primary School

## Curriculum Capture for Year 2 Science: Plants

### Key Knowledge

#### What does a seed need to germinate?

- Plants are important part of our environment because they help people and animals to live. Plants provide food for people and animals to eat and they also make **oxygen**.
- Plants can grow in many different places in soil like Sunflowers or water like waterlilies.
- Seeds and bulbs need water to germinate and grow. Most seeds do not need light in order to grow.
- Seeds and bulbs have a store of food inside them.

**Sunflower Seeds**



#### What happens to a seed? (life cycle)

- Most plants grow from a seed or a bulb.
- For a seed to survive and grow into a strong plant it needs water, light, suitable temperature, air and time to grow.

##### Life cycle.

- When a seed germinates it will start growing **roots** and **shoots**.
- Roots will grow deeper into the ground to find more water.
- Shoots will grow upwards to find light and grow a stem and leaves above the ground.
- Many plants make flowers, which turn into fruits.
- Flowers and fruits make their own seeds and process starts again.



#### How do plants disperse their seeds?

- Seed dispersal is the movement, spread or transport of seeds away from the parent plant.
- Plants have limited movement and rely upon a variety of ways to disperse seeds.
- Seeds can be dispersed away from the parent plant individually or collectively.

##### Ways plants disperse seeds.

- Wind**- blows the seed to the ground or carries the seed away from the parent plant.
- Bursting**- some plants have pods full of seeds which will burst, showering the ground with seeds.
- Shakers**- some plants rely on being shaken to disperse their seeds.
- Water**- some plants rely on water to disperse their fruits. These will either grow on the water or by the side of water. Some seeds are very light which helps them float away and grow elsewhere.
- Catching a ride**- Some plants hook on to animals (or people) that pass by, they will eventually drop off on to the ground.
- Seed as food**- animals (and people) eat seed and fruits. The seeds then pass through the animal unharmed and out the other end.

#### What do I want to find out about plant survival?

Plants can grow in many different places, but which do you think is best - a cold, dark fridge or a sunny windowsill?

**A sunny windowsill would be best.** On a sunny windowsill, the plant will get the warmth and light it needs. In time, it will grow big and strong!

In a cold, dark fridge the plant won't get the warmth and light it needs. It won't grow big and strong.

A plant needs sunlight, warm and water to grow. If a plant is missing one of these things, how will this affect its growth?



**seed dispersal**

### Scientific Vocabulary

|           |  |
|-----------|--|
| Germinate | Begin to grow and put out shoots.  |
| Disperse  | Distribute or spread over a wide area.   |
| Survive   | To continue to live.   |
| Grow      | To germinate and develop.  |
| Roots     | The part of a plant which attaches it to the ground for support and usually takes in water.                      |
| Stem      | Holds up the plant and carries water to the leaves.  |
| Leaves    | A part of the plant that takes in the sunshine and turns it into food, a process which is called photosynthesis. |
| Flower    | The seed-bearing part of a plant, that are usually surrounded by a brightly coloured petals.                     |
| Seeds     | The produce of a flowering plant, capable of developing into another such plant.                                 |