

#### Aim

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





















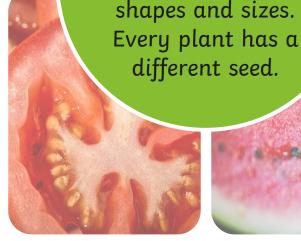
















Every single seed has the beginnings of a new plant inside it, along with a little store of food to help it grow.

When the conditions are right, the seed soaks up water and swells, and the tiny new plant bursts out of its shell. This is called **germination**.

#### Embryo:

The tiny root and shoot which will grow into the adult plant.

#### **Seed Coat:**

A tough outer covering.



#### **Food Store:**

A store of food for the young plant to use until it has grown enough to make its own food.

### Seeds and Bulbs: Germination





Click the button below to find out more about germination.

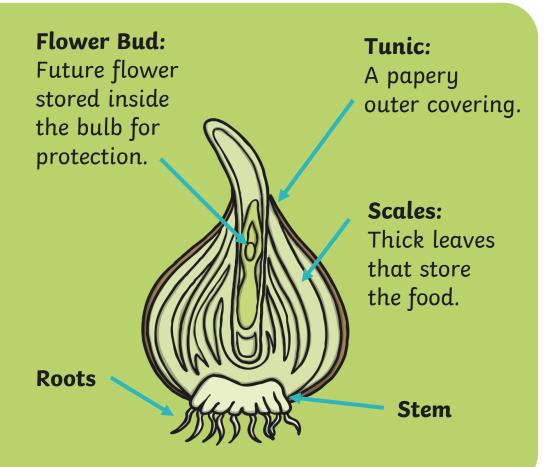






Some plants grow first from a seed, and then develop a bulb that helps them to grow back year after year.

A bulb lets the plant rest underground over the winter when it is too cold, then grow back later in the year when conditions are right.



Here are some common plants that grow from bulbs.











We are going to plant a seed and a bulb each, so we can **compare** how they grow.

**Comparing** means looking closely to see what is similar and what is different.





# What Do Plants Need to Grow?



Seeds and bulbs need to wait for conditions to be just right before seeds can germinate and bulbs can sprout new growth.

What do you think that our plants will need so they can sprout and grow well?



# Planting



As well as our seeds and bulbs, we are going to plant some extra seeds and set up a **comparative test**.

In our comparative test, we are going to plant the same seeds, and **compare** how they grow under different conditions.

This will help us to learn what plants need to grow well.



# Planting

#### You will need:

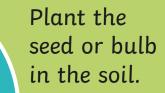
- 1 test seed
- 1 dwarf sunflower seed
- 1 paperwhite narcissus bulb
- 3 plant pots
- Soil



### Planting

Fill your pot half full of soil.





Cover the seeds and bulbs with more soil.





Put the seeds and bulbs in a warm and sunny spot.

# Plant Growth Comparative Test

In your group, you are going to compare the growth of your test seeds.

One seed will be given water and sunlight.

One seed will be given water but **no sunlight**.

One seed will be given sunlight and **no water**.

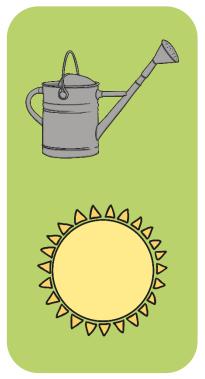
One seed will be given no sunlight and no water.

What do you think will happen to each of the seeds?

# Plant Growth Comparative Test

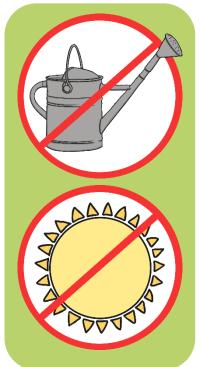


What conditions does each plant need? Where should they go?



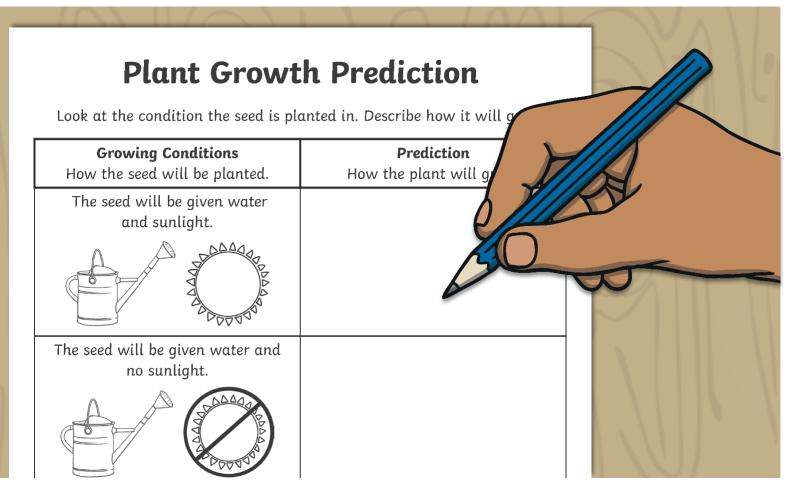






# Plant Growth Predictions





#### Plant Growth Predictions



Which seed did we predict would grow the best?

What conditions should we give our sunflower and narcissus plants so that they grow well?

### Seed or Bulb? Quiz



On the next slides are some foods that we eat.

Can you guess if the food is a seed or a bulb?





Seed

Bulb



Correct!

A pea is a seed. Well done!

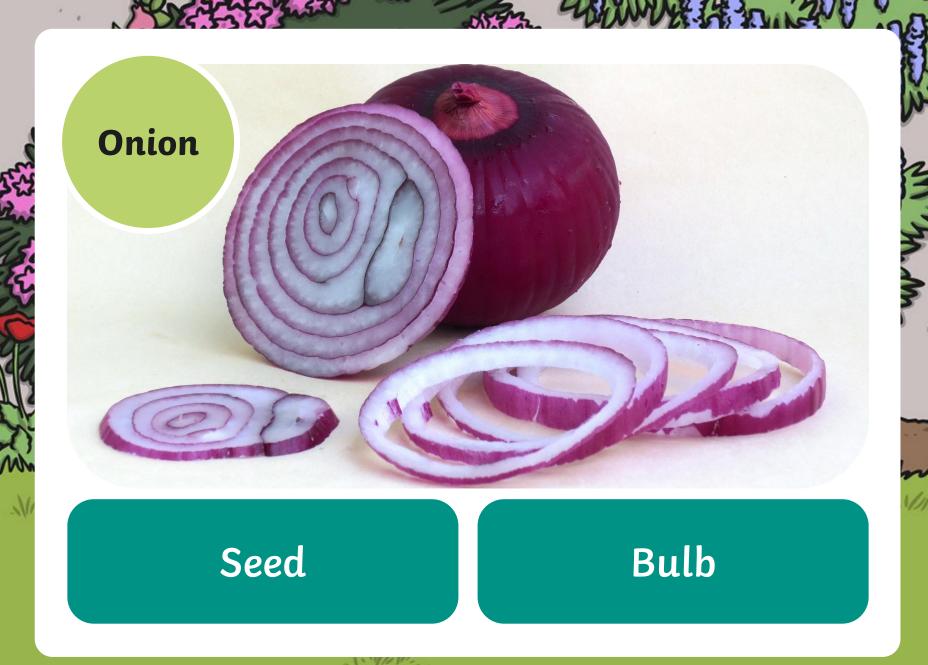




Bad luck!

A pea is actually a seed.







Correct!

An onion is a bulb. Well done!





Bad luck!

An onion is actually a bulb.





Seed

Bulb



**Correct!** 

A coconut is a seed. Well done!

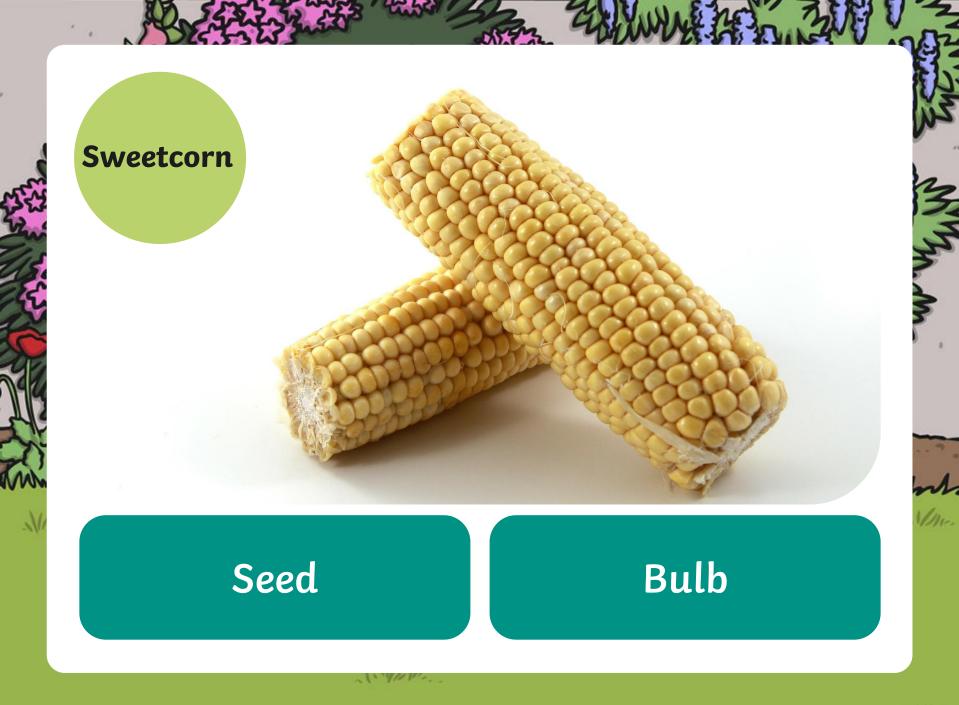




Bad luck!

A coconut is actually a seed.







**Correct!** 

A corn kernel is a seed. Well done!

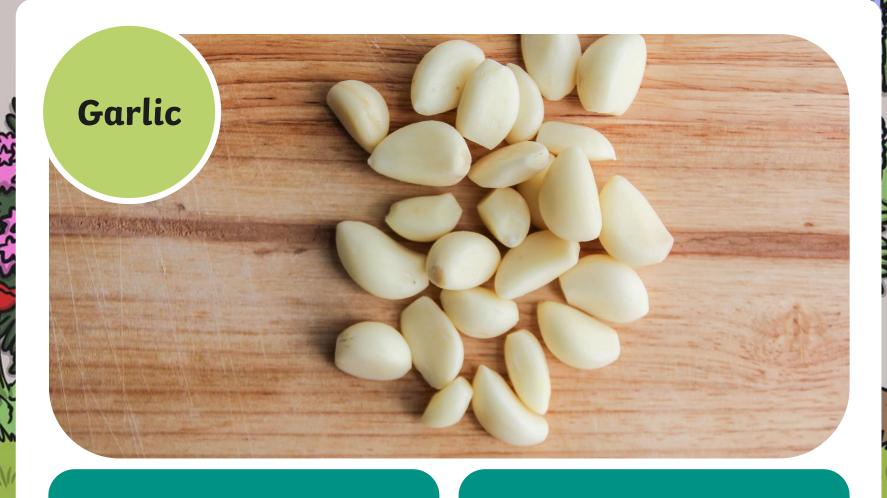




Bad luck!

A corn kernel is actually a seed.





Seed

Bulb



Correct!

Garlic is a bulb. Well done!





Bad luck!

Garlic is actually a bulb.



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