

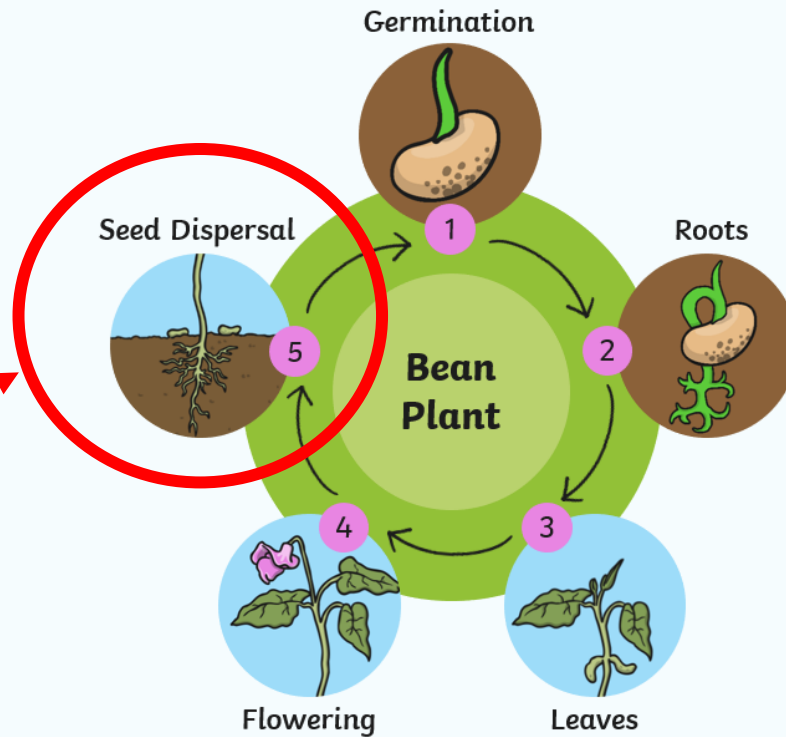
# Types of Seed Dispersal



twinkl



# Life cycle of a plant



We are going to be looking at different ways of seed dispersal!

See a video all about a plants life cycle.

<https://www.youtube.com/watch?v=dh-Q9chPWAaw>

# Why is it important for flowers and plants to disperse their seeds?

Seed dispersal allows a plant to make more copies of it's self and increases the numbers of that type of plant.

Go and watch this video and see if you can jot down the different ways flowers can disperse their seeds.

<https://www.bbc.co.uk/bitesize/clips/znvfb9q>



# Wind

Sycamore 'helicopters' and dandelion 'clocks' both have fruits which have adapted to use the wind to carry the seeds away when the seeds are ready.





# Bursting

Some plants have pods full of seeds which will burst, showering the ground with seeds, like the Himalayan Balsam seed. Peas are another example of a plant bursting open to disperse its seeds.





# Shakers

Some plants rely on being shaken to disperse their seeds. When poppies have produced their seeds and have finished flowering all that is left is a long stem with a dried seed pod. These pods have small holes at the top and rely on wind to shake them to scatter the seeds. This method doesn't send the seeds very far. Yucca Campestris seeds also need to be shaken.



Yucca Campestris seeds



Poppy seeds



# Water

Some plants rely on water to disperse their fruits. These will either grow on the water or by the side of water.

Water lilies live on the water so they use the water to disperse their seeds. They make very light seeds which will float away on the water for a while, then sink to the bottom of a pond to grow a new lily.



Lily seeds



Water lily



Palm tree seeds are very light which helps them float and grow another palm tree elsewhere. Palm trees that grow by the oceans drop their seeds which can be swept great distances by the ocean's currents. Coconuts are well known travellers.



Palm tree seeds

## Willow tree seeds



Willow and silver birch trees often grow near water. Their seeds are very light which enables them to float away on water (the silver birch seed is also fluffy which helps them to be dispersed by the wind too).



# Catching a Ride

Some plants such as cockleburrs have developed to grow tiny hooks on their fruits which hook on to animals (or people) that pass by the plant. Eventually they will drop off on to the ground.



This dog has been covered in burs.



Burdock seeds



# Seeds as Food

Some plants make tasty fruits. This is to encourage animals (and people!) to eat the fruits. The seeds then pass through the animal unharmed and out the other end with a ready supply of fertiliser (not tasty in the slightest...quite the opposite). This method ensures the seed is given nutrients to help it grow.

What types of fruits can you think of that are eaten by animals and people with seeds inside?





# Drop and Roll!

Some fruits, such as horse chestnuts, have a casing round them which cracks open when it hits the ground. The fruit inside then rolls away from the tree. You can tell which horse chestnuts in the trees are ripe because their casings have already begun to split open before they drop.







## **What do plants need to survive? Why might this be important for seed dispersal?**

Seeds need to be dispersed over a wide area so that they don't compete for light, water and nutrients. A plant needs all these things to stay alive.

If the seeds were all close together, not all of the plants would survive because they wouldn't get enough light, water or nutrients. That's why seed dispersal is so important.



The shape of a seed is really important to how it is dispersed and spread over a wide area. Plants are very clever and use their shape as an advantage.

Parachute seeds



Covered in fine hairs to make the seed float in the wind. They are sometimes a single seed but are sometimes several in a cluster.

Glider seeds



Shaped like an aeroplane and the wings slow the falling seed.

Helicopter seeds



Spin as they fall which allows them to travel quite a distance away from the parent plant.




**Go outside and see if you can find any seeds. Use ideas from the video or powerpoint to help you hunt. Then see if you can fill in the sheet.**

WALT: To understand the different ways in which seeds disperse

Date:

WILF: Identify how the seed is dispersed and explain why that seed is dispersed in that way giving features of the seed

Picture of the seed	Name of plant the seed came from	Method of seed dispersal and reasons why
Example: 	Strawberry Plant	I think the seeds are eaten by animals and then dispersed when they are excreted because the seeds are surrounded by delicious fleshy red fruit.



# Plenary

Why do plants disperse their seeds?  
List the ways in which the seeds are dispersed.

