

Last week the children learnt about different parts of plants. This week the children are learning how seeds are dispersed.

In this lesson the children will learn how dandelions disperse seeds and will be asked to make model dandelion seeds and observe how they travel through the air.

They will then go onto learn how seeds are not only dispersed by wind but also by animals, water and bursting open.

They have the optional activity of sorting seeds into different sets according to how they are dispersed.

**Key vocabulary:** germination, seeds, disperse

# Science

Plants  
and  
Seeds



Have you ever wondered how wild flowers grow?

In my garden I plant seeds or buy plants from the garden centre but this does not happen in nature.

So how do new plants grow in the wild?



This short video shows you the life cycle of a dandelion. This clever plant has a clever way of making sure lots of seeds get the chance to grow.

Watch the video.

What happens to the seeds?

<https://www.bbc.co.uk/bitesize/clips/zhrb4wx>



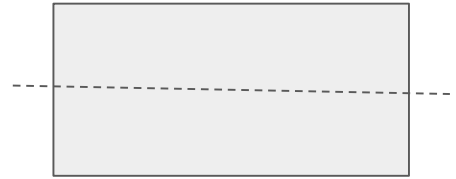
The flower head dries out and the seeds appear. Each seed has a 'parachute'. When the seed lands on the floor the parachute falls off.



Can you make different dandelion parachutes?  
Can you decide which dandelion parachute is the best?

You will need: **paper, scissors and sellotape**

1. Cut the paper in half to make 2 long strips.



1. Roll the strips to make 2 tubes. Sellotape the tubes so they do not unravel



## Test 1

Drop the tubes and observe how they fall. (Where do they land? How quickly do they fall?)

## Test 2

Now cut the tubes to create a dandelion parachute. Make one with thin strips and the other with thick strips.

Let them drop and observe how they fall.

(Where do they land? How quickly do they fall?)



# What did you notice?

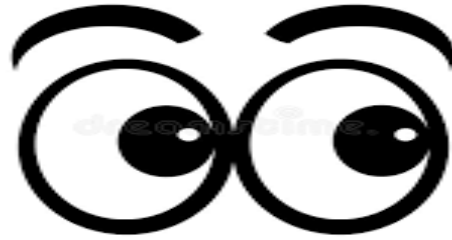
You should have seen that our models with flaps stayed in the air longer. By being in the air longer it gives the seeds more time to float further away.



The dandelion seeds can spread out. That's why dandelions are such a successful wild plant!



Watch this short video that explains how seeds are spread. This is called seed dispersal.



While you watch it see if you can spot the **4** ways seeds are dispersed.

<https://www.bbc.co.uk/bitesize/topics/zxfrwmn/articles/z28dpbk>

# 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.



Photos courtesy of gDoug2000, Ian Boyd (gflckr.com) - granted under creative commons license - attribution

# 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



# Catching a Ride

Some plants such as cockleburs 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?



This is another way  
seeds are dispersed.

## 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.



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## Can you sort the seeds?

You can print off the sheets or use the next slide to draw your seeds and put them into sets that show the different ways they are dispersed.

wind

water

catching a lift

water

exploding

# Seed Dispersal Sorting Activity

Cut out the squares and sort them into the correct page.



**sycamore**



**apple**



**poppy**



**peas**



**horse chestnut**



**dandelion**



**coconut**



**Himalayan  
balsam**



**ragwort**



**burdock**



**berries**



**acorn**