



Explore, review, think, talk....

What do you already know about seed dispersal?
(5-10 minutes)

Watch this clip from 'Life of Plants'.

<https://www.bbc.co.uk/programmes/p00lxwk5>



- How do you think the birdcage plant disperses its seeds?

- Seeds need to travel away from the parent plant so they can find a new place to germinate. This is called **seed dispersal**.
- Think or talk about different types of seed dispersal you already know about .

Seed dispersal is one stage in the life cycle of a plant.

Seed dispersal



Germination



Pollination



Fertilisation and fruit formation



Dandelions use the wind to disperse their seeds:

<https://www.bbc.co.uk/bitesize/clips/zs9c87h>



Different types of seed dispersal

Compare some different ways plants disperse their seeds
(10 minutes)

Seeds can be dispersed by **animals**.

- Birds and other animals often eat the fruit of a plant. The seed is not digested and can travel large distances before it is 'deposited'!



<https://www.bbc.co.uk/programmes/p00lxv9z>

- Other seeds have sticky burrs or spikes and catch on the fur or feet of animals to travel.



Seeds dispersed by the **wind** often have 'parachutes' or 'helicopters' to help them.

- Look at the seeds in this clip.

<https://www.bbc.co.uk/programmes/p00lxw4t>



- Think or talk about the differences between the seeds which are dispersed by animals and by the wind.



Investigating a helicopter design

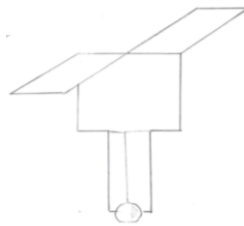
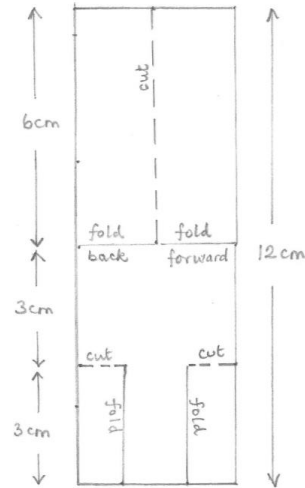
What is the best helicopter design for dispersing seeds?
(page 5-7: 30 minutes)

You can investigate a model seed helicopter to explore how different factors might affect its flight.

You will need:

- Some paper, scissors, pencil and a ruler.
- Sticky tack / Blu tack or paperclips.
- You may like to print templates from page 7 or 8.

Make a helicopter by following the instructions on page 6. Use a piece of sticky tack or a paperclip to represent your seed. Try flying it!

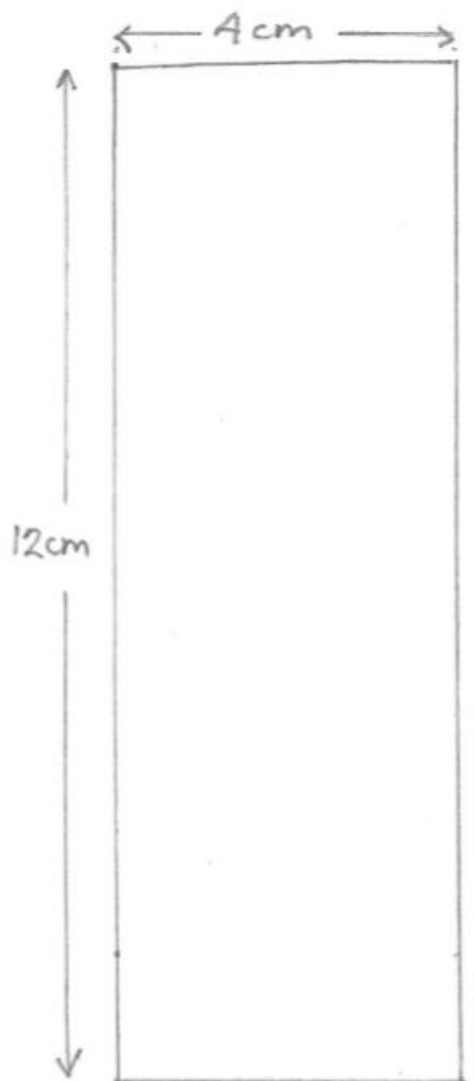


Planning your investigation:

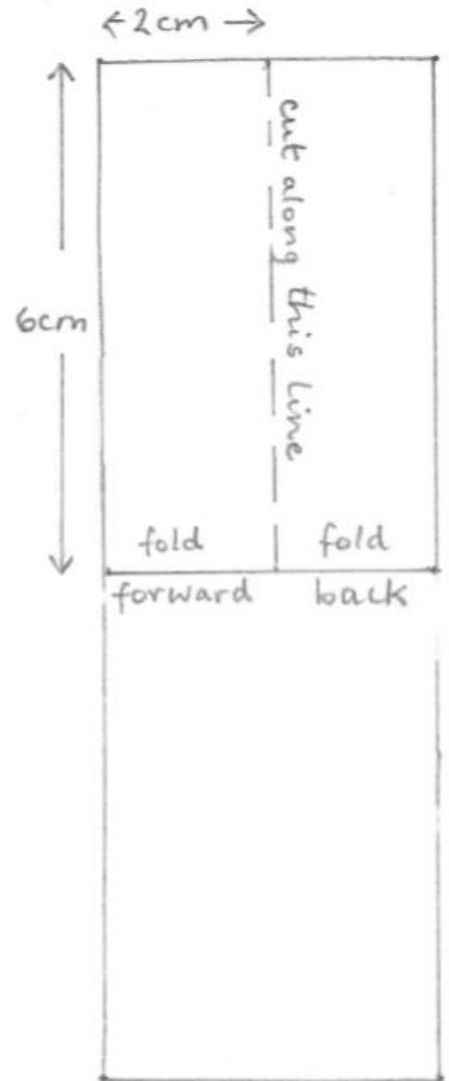
- Which factors (variables) might affect the flight of your seed helicopter?
 - Length of the wing?
 - Width of the wing?
 - Size or weight of the 'seed'?
- Choose **one factor (variable) to change**.
- Make three or four different helicopters.
- Think about how you are going to **collect and record your results** to find out which is the best for dispersing your seeds. You may wish to use a mobile phone stop watch.

Good luck!

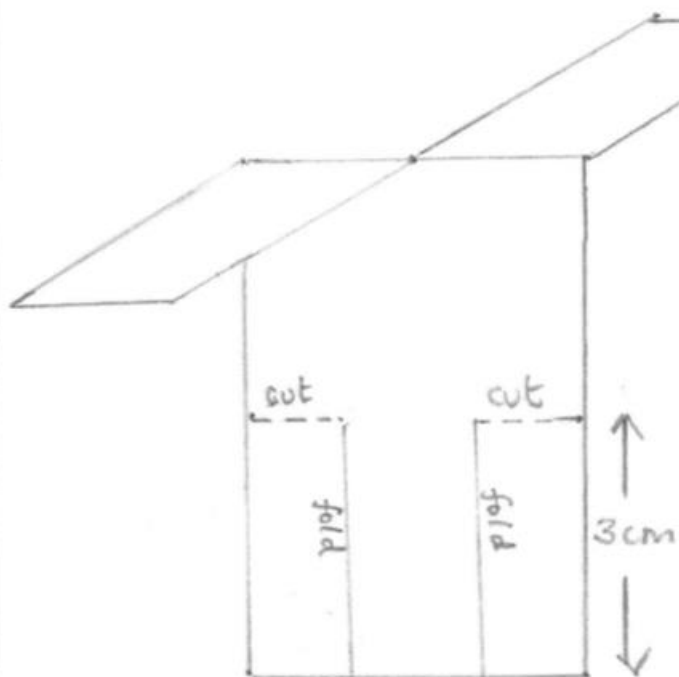
Instructions for making a seed helicopter. *You can change the measurements to suit your design!*



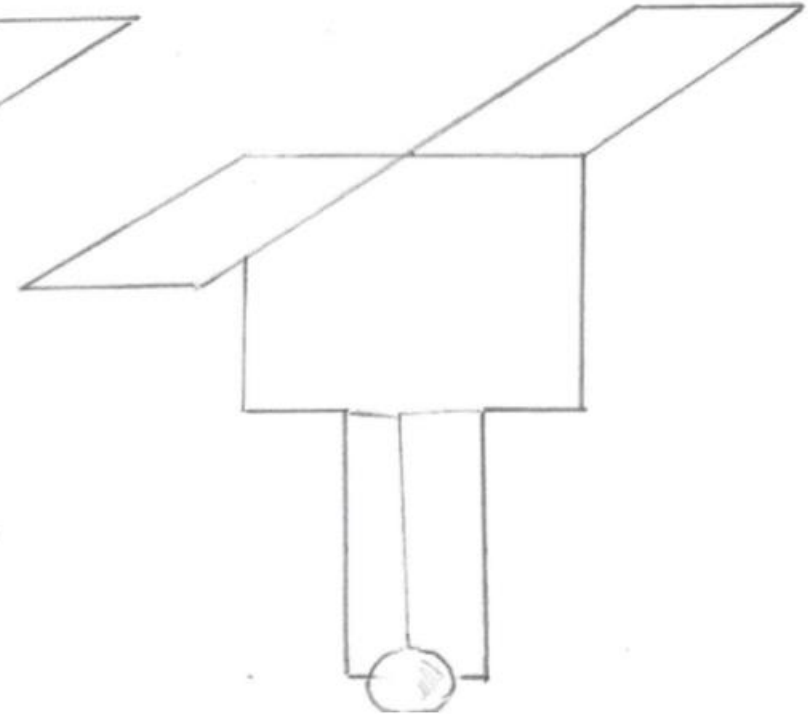
1. Draw a rectangle 12cm long and 4cm wide.



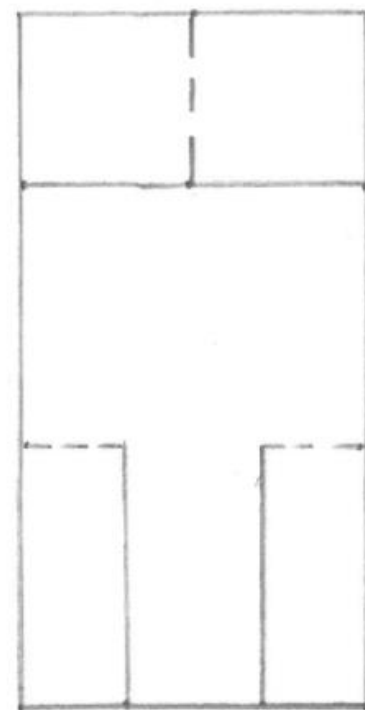
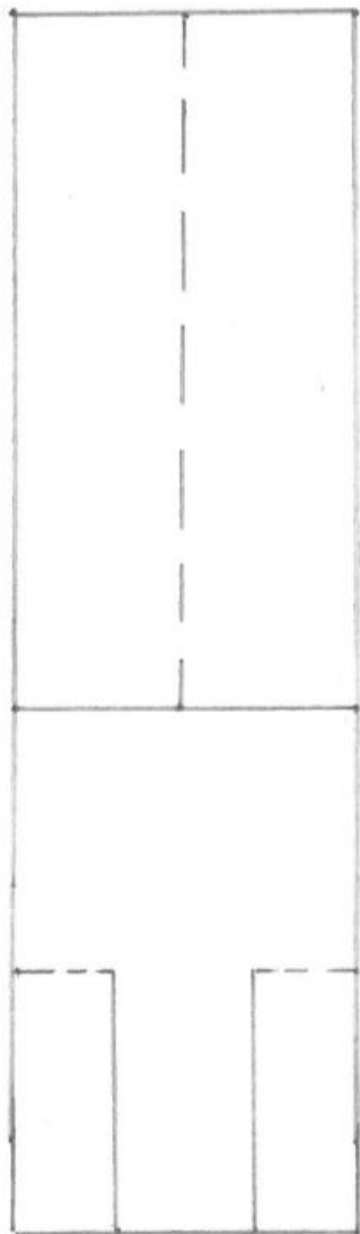
2. Make the 'wings' at the top by cutting and folding as shown.

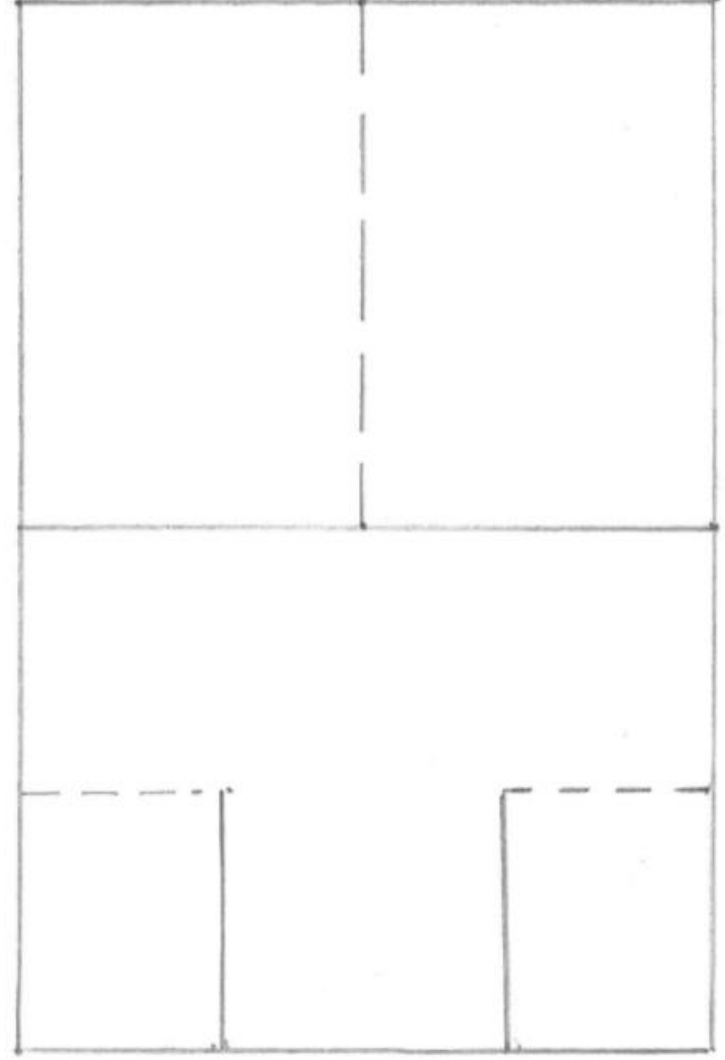
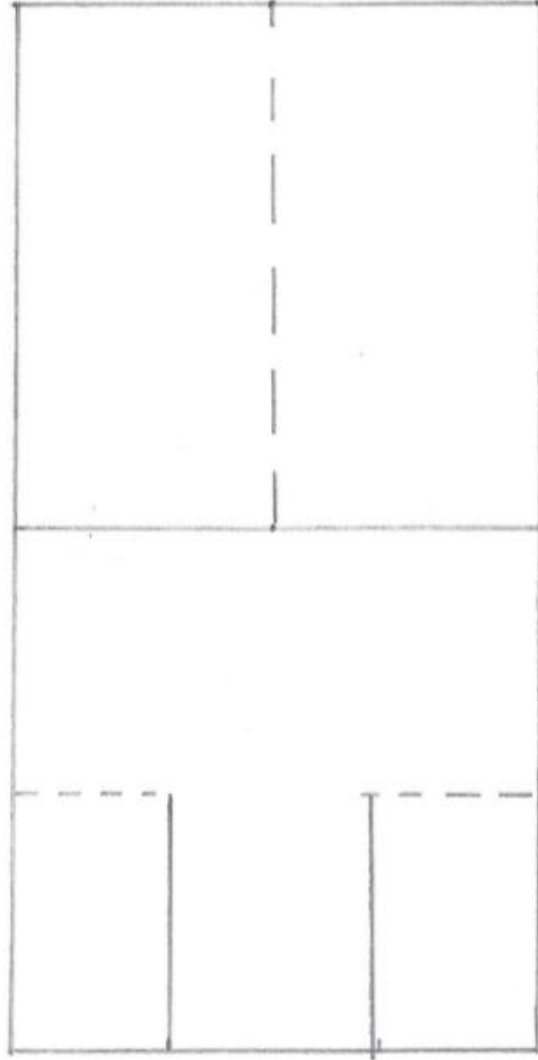
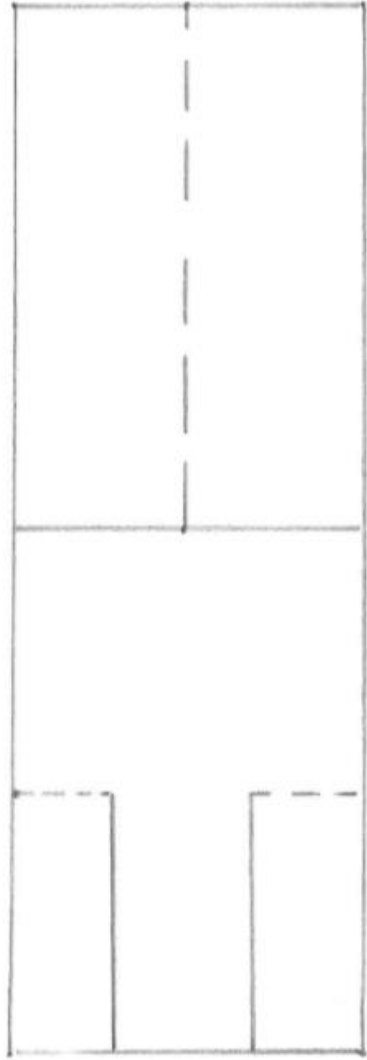
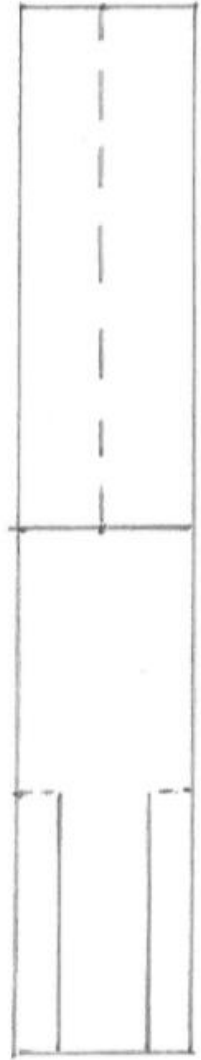


3. Make the 'seed carrier' at the bottom by cutting and folding as shown.



4. Attach a piece of sticky tack or a paperclip to represent the seed.







Find out more...

Find out about some unusual ways that seeds are dispersed by animals

Some seeds are dispersed by animals in more unusual ways. Watch these three clips from 'Private Life of Plants'.

<https://www.bbc.co.uk/programmes/p006999s>



<https://www.bbc.co.uk/programmes/p00lxvrk>



<https://www.bbc.co.uk/programmes/p00crfc4>



Think about the journey of one of these seeds:

- *A seed from an acacia tree which is eaten by an elephant.*
- *A seed which falls to the ground and is found by ants.*
- *A seed in a mistletoe fruit which is eaten by the mistletoe bird.*

Write a story about the journey of the seed and how it successfully starts to grow into a new plant.

You may like to imagine you are the seed!

Glossary of terms

- **Sexual plant reproduction** is when a plant reproduces by forming seeds or spores.
- **Pollination** is when pollen is carried from the male part to the female part of a plant, usually by insects or the wind.
- **Seed dispersal** is when seeds are carried away from the parent plant, often by the wind or by animals. This enables the seeds to germinate away from the parent plant.