

What do I need?

Pages 2-5 of this worksheet

A4 paper cut into a square

Coloured pens & pencils



See page 3 for folding instructions...



stages of plant growth: cootie catcher

How do I make a cootie catcher?

Fold your paper into a cootie catcher using the instructions on page 3.

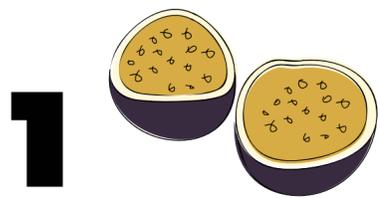
Look at the main stages of plant growth on page 2. Can you memorise all 8 stages?

Draw and label the four outer sections of your cootie catcher with a different plant, for example lavender, mint, orange or sunflower.

Unfold the top layer of paper and label the sections 1-8.

Under each number draw and label the matching stage of plant growth, e.g. 1 = stage 1.

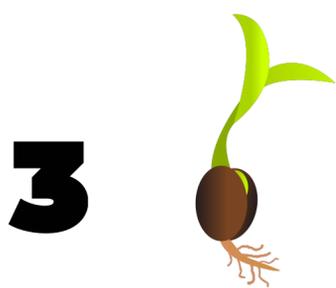
Stages of Plant Growth



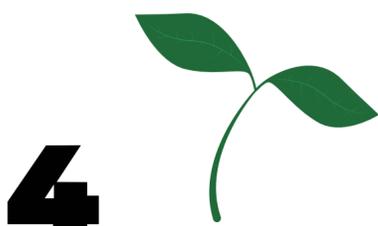
Seed - A seed is the part of a plant which can grow into a new plant. Seeds contain all the nutrients they need to germinate when the plant disperses them.



Sowing - A seed is placed in soil or compost and given the right amount of water, light and heat to germinate. You can sow seeds from seed packets or harvest them from mature plants. Plants can sow their own seeds too!



Germination - The first signs of growth usually appear in 2-10 days if the conditions are right. The seed sends its first shoot up towards the light and its first root down.



Seedling - The shoot and seed leaves pop through the soil to begin absorbing sunlight and carbon dioxide. The stem lengthens and the first true leaves are grown. Roots grow and take up water and nutrients from the soil. Photosynthesis begins as the plant uses sunlight to convert water and carbon dioxide into energy.



Vegetative - Roots, leaves and stems continue to grow and the plant begins to flourish. These help to make the plant strong and healthy before flowering. Some plants take just a few weeks to flower while others take months or even years!



Budding - When the plant reaches maturity it produced flower buds. A bud is an immature flower with the sepals tightly enclosing the inside of the flower to protect it until it is ready to open.



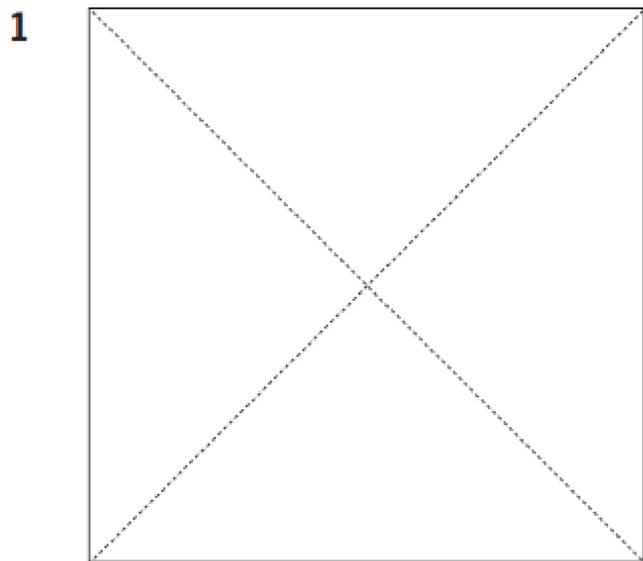
Flowering - Flowers are the part of the plant from which seeds and fruit develop. This is one way that plants reproduce. Flowers are often brightly coloured and scented to attract pollinating insects like bees and butterflies. These insects transfer pollen grains from the male parts of the flower to the female parts of the same or a different flower. This process is called pollination. Fertilisation is when the pollen unites with an egg inside the ovary of a flower to produce a young seed.



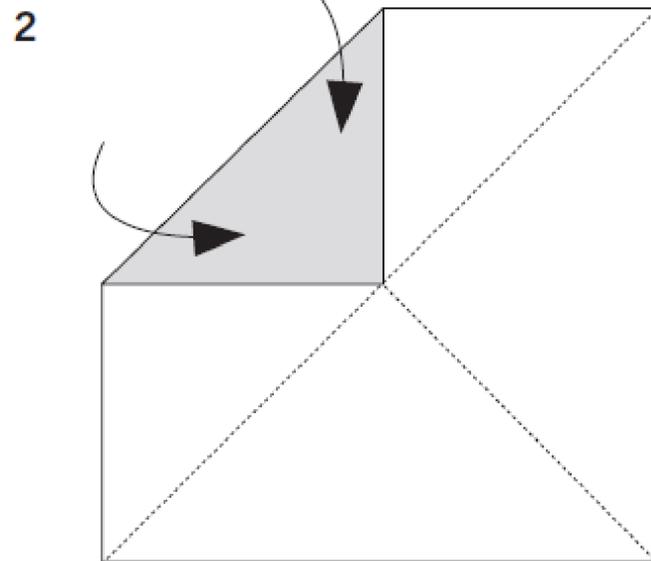
Ripening - The seed(s) ripen inside the ovary until they are mature and ready to be dispersed. Plants like apples, oranges and roses grow fruit around their seeds to tempt birds and other animals to eat them and disperse them in their droppings. Other plants disperse seeds by wind or water or by producing exploding seed pods! Gardeners like to harvest and disperse seeds too.

Folding a cootie catcher

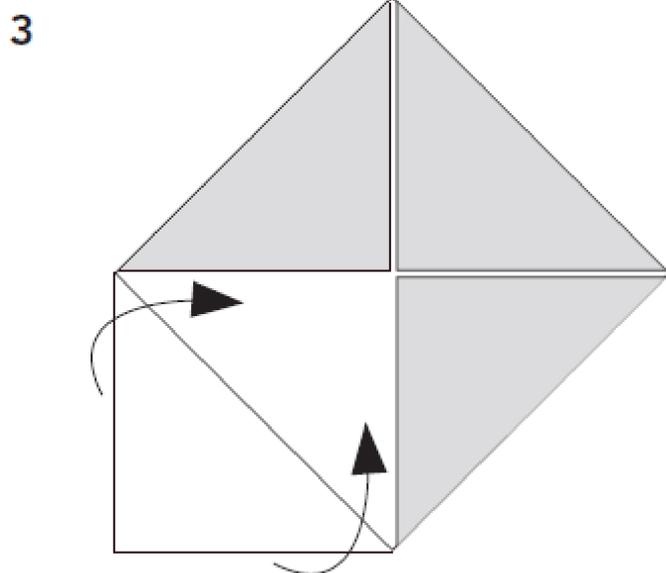
Fold your paper diagonally in half both ways



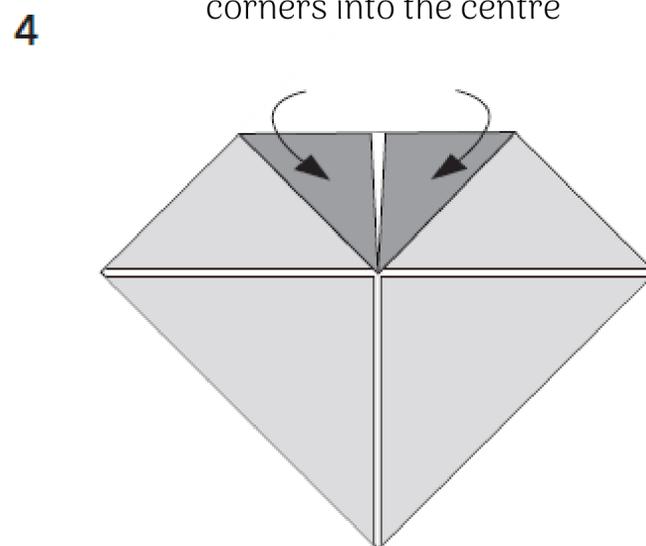
Fold the outer corners into the centre of the paper



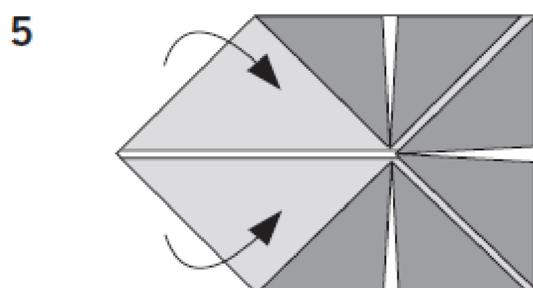
Make sure all four corners are folded inwards



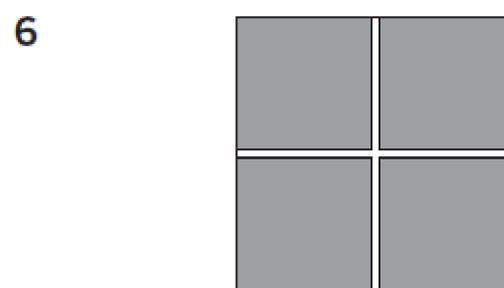
Turn the paper over and fold the outer corners into the centre



Make sure all four corners are folded inwards



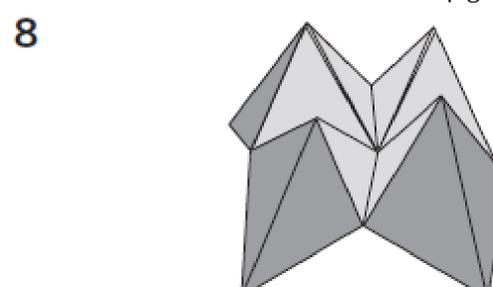
Turn your square over



7 Fold in half along the vertical line



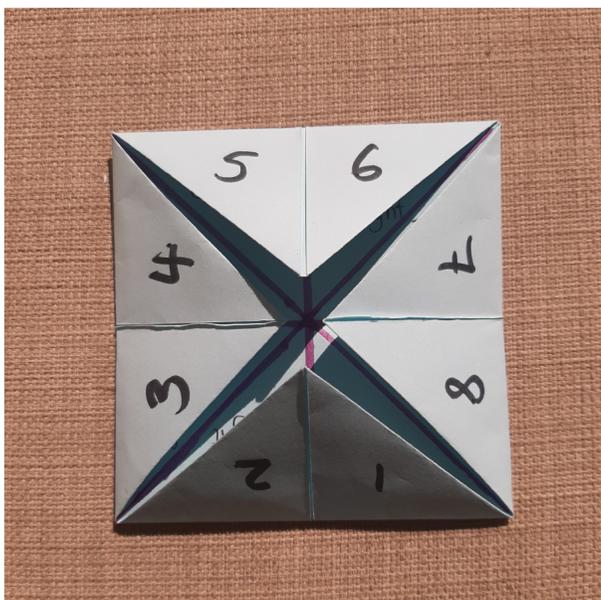
Push your fingers through the flaps at the bottom until it forms a pyramid shape



Labelling a cootie catcher



- On the outside of the cootie catcher draw and label a different plant on each of the 4 sections.



- Turn the cootie catcher over and number the 8 triangular sections 1-8.



- Underneath each number, draw and label the corresponding stage of growth, e.g: 1 = stage 1 (seed), 2 = stage 2 (planting), 3 = stage 3 (germination)...

To make the game more challenging, why not write a few key words and phrases about each stage underneath your drawing?

How to play



- Hold the cootie catcher using your thumbs and fingers. You should be able to open and close it easily. Now ask a friend to choose one of the plants you drew on top. Spell out the plant by opening and closing in time with the letters. For example: s-u-n-f-l-o-w-e-r.



- On the last letter, ask your friend to choose one of the numbers from the open cootie catcher. Count to that number using the same technique.



- Ask your friend to choose another number then test them on what stage of plant growth it corresponds to. For example, if I pick number 7 I must tell you that stage 7 of plant growth is...



- Open up the flap to check if your friend has got the answer right Ask them to tell you more about what happens during that stage of growth.

Now swap and get your friend to test you!