

Guidance for flower dissection

Note - please check for any pollen allergies before starting

Equipment:

- Flower
- Tweezers
- Knife
- Plain A4 paper
- Double sided tape

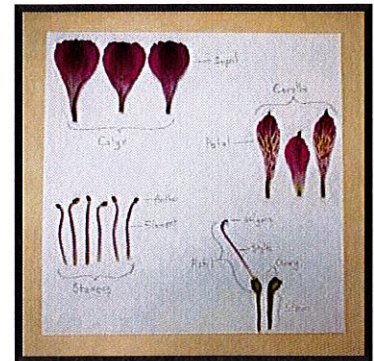
Choice of flower:

Winter - snowdrop, winter jasmine

Spring to early summer - peony, perennial geranium, gladiolus, wallflower

Summer and autumn - lily, sweet pea

(Flowers to avoid due to more unusual or hidden structures: daisy, dandelion, buttercup, daffodil, poppy, rhododendron)



Dissection instructions:

1. Secure the flower stalk with sticky tack or Plasticine and explore the flower with a magnifying glass
2. Start at the base, and remove the sepals (using fingers or tweezers) and place on your piece of paper
3. Remove the petals, and try to identify your plant as either a monocot or a dicot. Monocotyledons have petals in multiples of three and the leaf veins are parallel, while dicotyledons have petals in multiples of four or five and the leaf veins are branching
4. Next remove the stamens, and examine the pollen using the magnifying glass and note its shape
5. Now remove the carpels or pistil and cut it in half lengthwise, (be careful to keep your fingers out of the way) and use your magnifying glass to examine the inside of it. You should be able to identify the style and might be able to see tiny eggs, or ovules, in the pistil's ovary
6. Arrange the flower structures on double sided sticky tape, on the piece of paper, either in the form of an 'exploding' flower, or arranged in lines or 'clumps'
7. Once completed, label each part and cover the dissected flower with sticky backed plastic to protect it

Virtual Dissection

You can also dissect flowers online:

Simple: Lifecycles, BBC: www.bbc.co.uk/bitesize/ks2/science/living_things/life_cycles/play/

Complex: Interactive virtual plant dissection lab, Chinese University of Hong Kong:

<http://www.cuhk.edu.hk/bio/IVPDL/>