



BRIGHTON
COLLEGE

Biology at home: flower dissection

Flower dissections at home



Fig. 1

Even if we can all venture no further than the garden, this is a perfect time to spend a few moments looking in more detail at the reproductive organs of plants, and how they are adapted for pollination by the insects now starting to make an appearance in the spring sunshine.

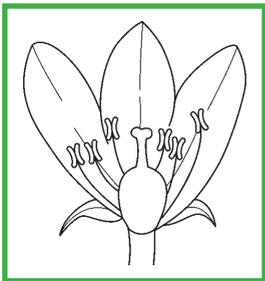
Before you find a flower to dissect, be aware that some plants contain toxins. To minimise any potential risk check first that you have chosen a safe flower to dissect. The pollen of some flowers e.g. lilies stains clothing and these should be avoided. Also, don't choose a daisy or their relatives (e.g. dandelions) – their inflorescences are in fact multiple 'composite' flowers.

Use Fig. 1 a guide to help you as you dissect.

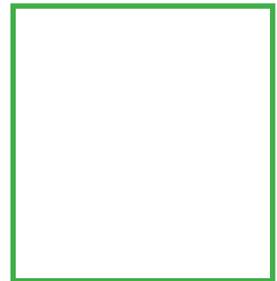
1. The perianth (petals and sepals)

The sepals protect the flower in bud and may also help attract pollinating insects. The bright showy petals attract insects (look for markings called nectar guides that help guide the bees) as well as providing a landing platform for pollinators. Bees prefer flowers that are blue, purple, white and yellow. What colour are the petals on your flower? How many petals are there?

Using tweezers, carefully take off the petals from one side of the flower so that you can see the male and female reproductive organs. Your flower may look similar to the one in the first box:



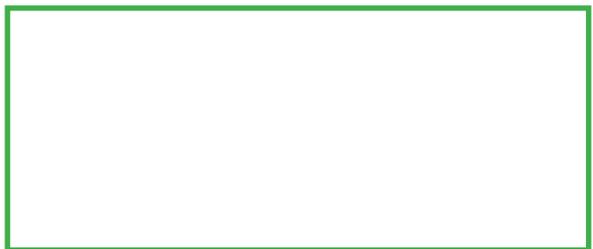
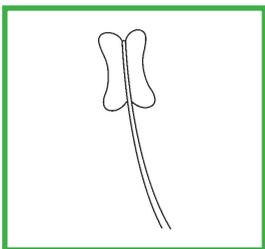
A petal from the flower – stick in or draw the shape of one petal in this box.



The flower looks like this – draw a picture showing the flower taken off.

2. Androecium (the male part of the flower)

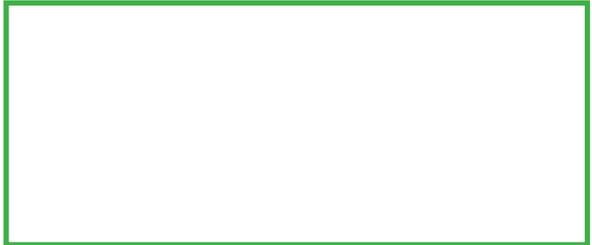
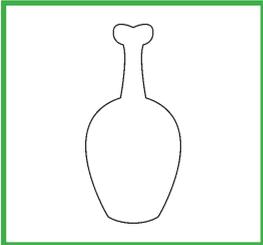
This consists of the pollen-producing stamens, comprised of a stalk-like filament and a pollen-producing anther. Now take off one stamen. Stick them or draw them in the boxes below. Label their parts if you can. How many stamens are there in the flower you have chosen?



The stamen looks like this.

3. Gynoecium (the female part of the flower)

The carpel consists of three parts – the stigma (where pollen is received), the style and the ovary (where the immature ovules are found; when fertilized these will eventually develop into seeds, the next generation of the plant)



The carpel looks like this.

When finished, why not try another flower that at first glance looks completely different? If you have primroses in your garden, you could investigate which have pin flowers and which thrum [I'll leave you to Google these terms for yourself!].



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