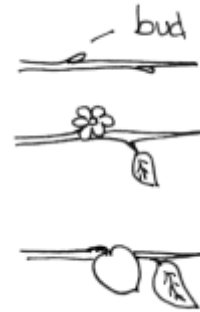




## Apples - How do apples grow?

### Fact

- First the mature apple tree grows tiny flower buds and tiny leaf buds – these are like bumps on the twigs.
- In spring the tree is covered with blossoms when the flower buds open. Then the leaf buds open and develop.
- Bees and other insects collect nectar from the flowers and transfer pollen from one flower to another – this fertilises the flower.
- The pollen is the male cell from the flower and it grows tubes down into the female ovaries at the base of the flower petals
- When the petals fall off the flower the tiny ovaries begin to swell and grow into an apple.
- The apples grow bigger and bigger until in late summer they're ready to eat.



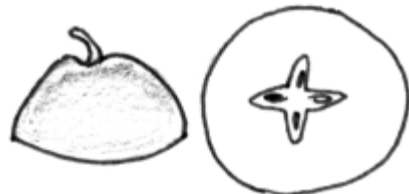
### Do you know

- The leaves on the apple tree change sunlight into food for the tree which helps the apples grow.
- Inside the apple are seeds which can grow into new apple trees.
- All through autumn the apple tree loses its leaves because it is a deciduous plant.
- In winter the tree is bare and it rests until spring when new tiny buds start opening.

### Experiments you can do

Collect some blossom branches and look at the base of the flowers for the ovary with unripe green seeds that will turn into an apple.

Lay an apple on its side (so the stalk is to the side not at the top) and carefully cut it open round the middle so you can see the seeds. Can you see how each seed has its own little "room"? Have a look at the skin of the apple – is it very thick? Bite into it – is the skin very tough? The skin protects the juicy insides of the apple.



### Other Investigations

If you have a fruit tree in your garden (it doesn't have to be an apple tree it could be a lemon or orange tree) have a look at it. What season is it right now? What stage is the fruit tree in? Does it have bumpy buds or is it flowering or is the fruit starting to grow?