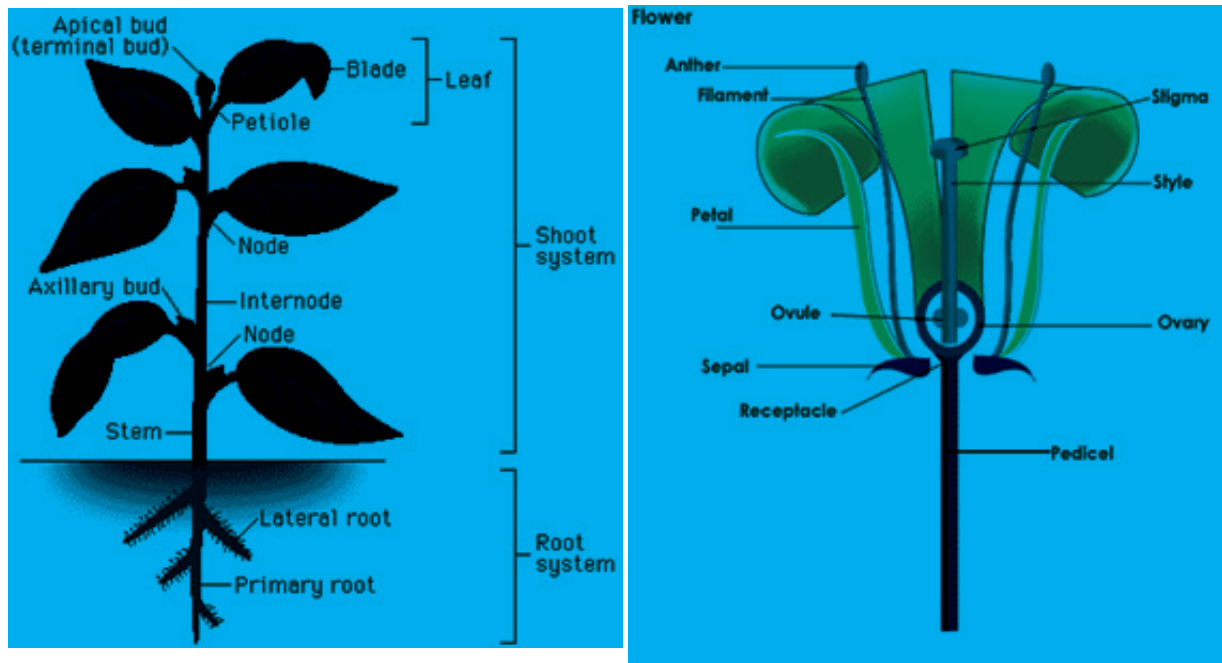


## Plant adaption

### Worksheet 1 - teacher's notes

1. Have a look at the structure of the plant and the structure of a flower.



[http://www.phschool.com/science/biology\\_place/biocoach/plants/basic.html](http://www.phschool.com/science/biology_place/biocoach/plants/basic.html)

<http://www.sparknotes.com/biology/plants/plantstructures/section5.rhtml>

Use the pictures and the websites to answer the questions:

- Which part of the leaf has the main function to carry out photosynthesis? *a blade*
  - The petiole is part of which plant organ? *a leaf*
  - Where on the stem are the axillary buds attached? *node*
  - What is the role of the sepals? *protect the flower in bud*
  - What is stamen? *male reproductive organ*
  - Where does pollen land? *the stigma*
2. What is adaptation? Can you think of any examples of plant adaptation ? What do plants adapt to?  
Watch the film and answer the questions:

<http://studyjams.scholastic.com/studyjams/jams/science/plants/plant-adaptations.htm>

*An adaptation is a physical or behavioral characteristic that has developed to allow an organism to better survive in its environment, to the environment they live in,*

## Plant adaption

3. Watch a film <http://www.youtube.com/watch?v=C1Ib0-BIBKU> and write down the examples of adaptation of the following rainforest plants:

Plant	Examples of adaptation
Pitcher plant	Traps insects into the pitcher using nectar, slippery inside walls
Mimosa pudica	Folds the leaves- defense from herbivores or heavy tropical rain
Epiphyte plants	Grow on other plants to get closer to the light source
Flowers	Attract attention of pollinators
Mangroves	Roots stabilize the plant, leaves extract the salt,
Travelers palm	Big leaves act like solar panels, stem collects water

4. Adaptation was also a vital concept in Charles Darwin's evolution theory. Look at the drawing of *Angraecum sesquipedale* orchid. (<http://blog.thaumatography.net/category/uncategorized/>)



Seeing the plant Charles Darwin predicted existence of a very specific insect. Can you think why?

*a moth able to suck the nectar*

Check your answer: <http://www.the-guardian.com/science/lost-worlds/2013/oct/02/moth-tongues-orchids-darwin-evolution>

<http://cryptomundo.com/crypto-zoo-news/darwins-xanthopa/>