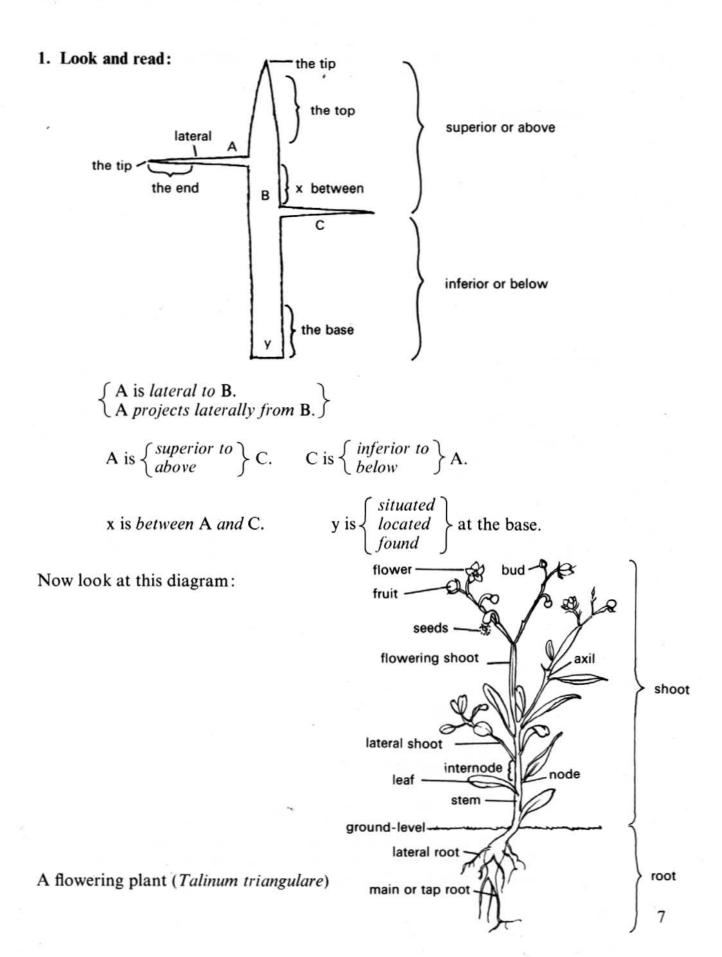
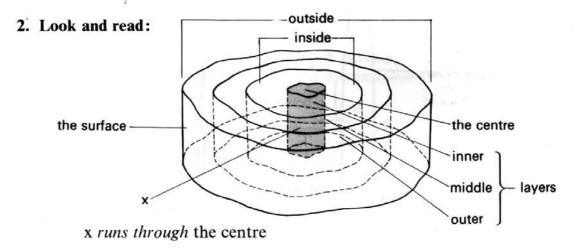
Unit 2 Location

Section 1 Presentation

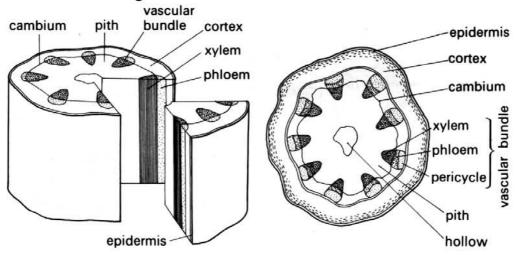


Answer these questions:

- a) Where is the shoot usually found above or below ground-level?
- b) Where is the root usually found?
- c) Which parts are lateral to the stem?
- d) Which parts are located at the tip of the flowering shoot?
- e) Which part of the plant is situated at the base?
- f) What projects laterally from the root?
- g) Where is the internode in relation to the nodes?
- h) Are the buds inferior to the stem?



Now look at these diagrams:



Stereogram of a plant stem

Transverse section of a young sunflower stem

Complete these sentences:

The . . . of a plant stem is a thin layer which is called the epidermis. Inside the epidermis there are three

The . . . layer is called the cortex.

There is pith in the

... the pith and the cortex there is a ..., which is called the cambium.

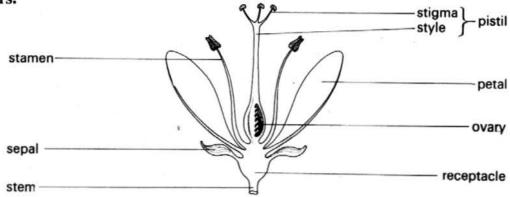
Some plants have a hollow in the . . . of the stem.

The vascular bundles are tubes which run . . . the stem.

The xylem, the phloem and the pericycle are situated . . .

The . . . is on the outside of the vascular bundle, the . . . is on the inside and the . . . is between them.

3. Look at the diagram and read the text. Choose the correct words from the pairs.



Parts of a flower in longitudinal section

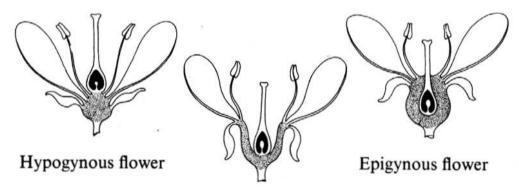
The flower is found at the end/base of the stem. It consists of a special part of the stem/root which is called the receptacle, and special leaves called floral leaves. These are arranged in rings or whorls.

The sepals form the calyx. This is the lowest/highest and innermost/outermost whorl.

The petals of the flower form the corolla. They lie inside/outside the sepals and are attached slightly higher/lower on the receptacle.

The stamens, or male reproductive organs lie outside/inside the petals. They are outside/inside the pistil, or female organ. This rises from the base/centre of the receptacle. It has an ovary at the tip/base. Below/above the ovary is the style. At the tip/base of the style are the stigmas.

4. Look at these diagrams:



Perigynous flower

Variation in the shape of the receptacle in different kinds of flower

Now answer these questions:

- a) Which part of the flower varies in shape?
- b) Which part varies in position?
- c) Which kind of flower has a conical ovary?
- d) Which kind has a cup-shaped ovary?
- e) Which kind has the ovary at the top of the receptacle?
- f) In one of these flowers, the ovary is said to be inferior. Which one?
- g) Can you give an example of each kind of flower?

conical

a cup