

# TOPIC 3: PLANT NUTRITION & TRANSPORT

## EXERCISE 4

1. Use words from the list to complete the sentences below.

carbon      carbon dioxide      chemical      chlorophyll  
haemoglobin      heat      hormones      light  
nitrogen      oxygen      phloem

Each word may be used once, more than once or not at all.

(a) Energy from the Sun is converted into ..... energy during photosynthesis. This energy is trapped by ..... and used to combine water and ..... to form glucose.

[3]

(b) Ions containing ..... are needed for a plant to form proteins.

[1]

2. Fig. 7.1 shows a section through a leaf.

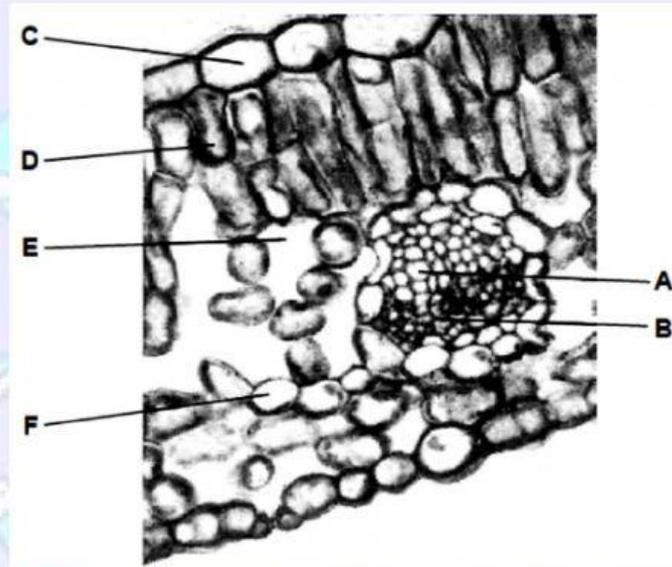


Fig. 7.1

(a) Use letters on Fig. 7.1 to identify

- (i) an air space, .....
- (ii) a palisade mesophyll cell, .....
- (iii) a xylem cell. .... [3]

(b) A chemical present in chloroplasts enables the plant to carry out photosynthesis. The process involves light energy.

(i) Name this chemical.

.....

[1]

(ii) State the form of the energy at the end of this process.

.....

[1]

(c) Name a process by which water vapour is lost from the leaf.

.....

[1]