



Unit 3 • Organisms and their Structure: parts of a plant

Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 33

1 Key words

[4]

Match each word in Column A with its description in Column B. Write the letter in the box. One description in Column B is not needed. Each match carries 0.5 mark.

Column A

Column B

- | | | |
|------------------|----------------------|---|
| 1. root hairs | <input type="text"/> | a. pollen grains reaching the stigma |
| 2. node | <input type="text"/> | b. tiny pores on a leaf through which gases pass in and out |
| 3. stomata | <input type="text"/> | c. the wall of a fruit, which protects the seeds |
| 4. transpiration | <input type="text"/> | d. a living thing that takes its food from another living thing |
| 5. pollination | <input type="text"/> | e. fine hairs near a root's tip that absorb water and salts |
| 6. pericarp | <input type="text"/> | f. the part of the embryo that grows into the shoot |
| 7. radicle | <input type="text"/> | g. a joint on a stem from which leaves and branches grow |
| 8. parasite | <input type="text"/> | h. the loss of water as vapor from the leaves |
| | | i. the part of the embryo that grows into the root |

2 Multiple choice

[5]

Choose the correct option for each of the following questions.

- i. What is the main job of a root? [1]
- a. to carry water and salts all the way up to the leaves
 - b. to absorb water and salts from the soil and send them up into the stem
 - c. to carry food to every part of the plant
 - d. to store food
- ii. Which of these is a modified stem? [1]
- a. sweet potato
 - b. potato
 - c. sugarcane
 - d. carrot
- iii. The table gives some parts of a flower. Which are the male parts? [1]

1. stamen	4. anther	7. sepal
2. ovary	5. stigma	8. pistil
3. petal	6. pollen grain	9. ovule

- a. 3, 5, 8
- b. 1, 4, 7
- c. 1, 4, 6
- d. 2, 5, 9

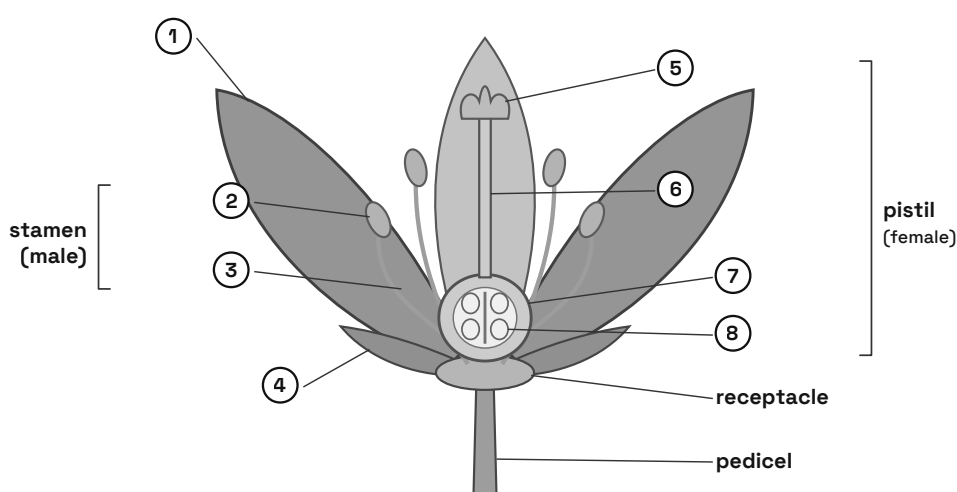


- iv. The pitcher plant is an insect-eating plant. Part of its leaf is shaped like a jug. When an insect comes near, it slips in, the lid above the jug covers it, and the plant kills it in its digestive juices and absorbs the nutrients. For what purpose has the jug-shaped leaf been modified? [1]
- a. to catch insects
b. to kill and eat insects
c. to get nutrients from insects
d. to cover insects
- v. When a plant reproduces, which of these happens first? [1]
- a. the seed forms
b. fertilization
c. the fruit forms
d. pollination

3 Label the diagram

[4]

The diagram shows a flower cut in half. Write the names of the parts numbered 1 to 8. Each carries 0.5 mark.



- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |

4 Very short answers

[4]

Write very short answers to the following questions.

- a. Which part of a plant is called its food factory? [1]
- _____
- _____
- b. Name the green substance that makes leaves green. [1]
- _____
- _____



c. After fertilization, which part of a flower grows into the seed? [1]

d. What kind of root system does a dicot plant usually have? [1]

5 Short answers [10]

Write short answers to the following questions.

a. Write any two jobs of a leaf. [2]

b. At the local market, Reshma bought sweet potatoes and Naresh bought potatoes. [2]

- i. Which part of a plant did Reshma buy: root, stem, leaf, fruit or seed?
- ii. Which part of a plant did Naresh buy?

c. Write any two differences between a monocot plant and a dicot plant. [2]

d. Give a reason: sugarcane and potato are both stems. [2]

e. Plants that grow in dry places often have leaves changed into spines. How does this help them? [2]



6 Long answer

[4]

Write a long answer to the following question.

What are the main jobs of a stem? Write any four.

7 Think

[2]

Think, then answer.

The stilt roots of maize and the storage root of a carrot are both modified roots. Do they do the same job? Explain.

8 Activity: Inside a maize grain and a gram seed (Activity 3.7)

(not marked)

Soak a maize grain and a gram (chana) seed in water overnight. Peel off their seed coats, look inside, and fill in the table.

	Gram seed	Maize grain
Does it split into two halves?		
Number of cotyledons		
Size of the endosperm (large or little)		
Monocot or dicot?		

Find the radicle and the plumule. Which grows into the root?

