

TUESDAY 31ST MARCH 2020

SCIENCE LESSON SIX

1. Why are plants green?

They have chlorophyll

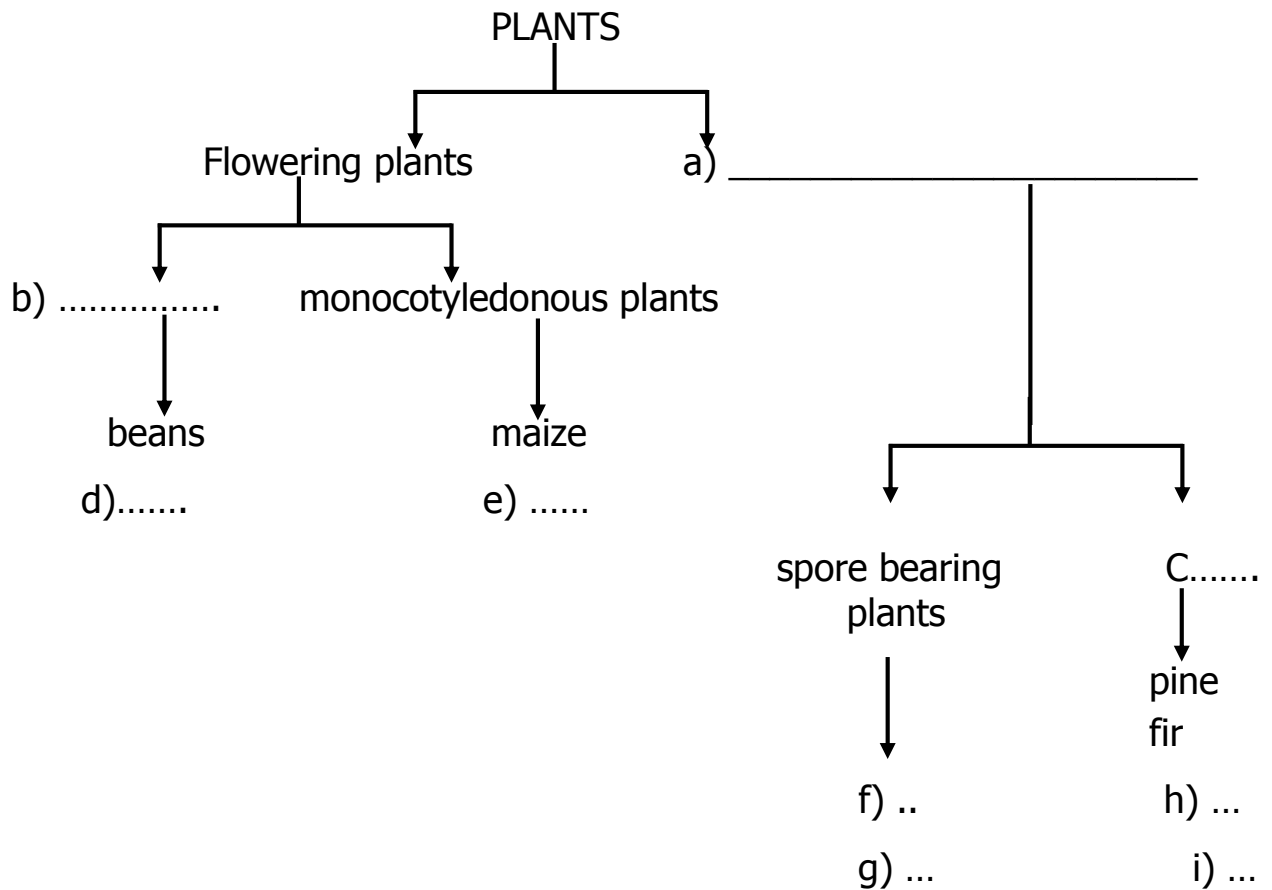
2. How do plants feed?

Phototrophically

3. What is the main difference between plants and animals?

Plants have chlorophyll while animals have no chlorophyll/plants make their own food while animals feed on already made food

4. ***The illustration below is about classification of plants. Study it carefully and complete it correctly.***



- i. a **non flowering plants**
- ii. b **dicotyledonous plants**

- iii. c **coniferous plants/conifers**
- iv. d **ground nuts, coffee, soya beans, mangoes**, etc. (all dicots)
- v. e **rice, millet, sorghum, wheat, barley, simsim**, etc (all monocots)
- vi. f **ferns, mosses, liverworts, hornworts, horsetails**
- vii. g **ferns, mosses, liverworts, hornworts, horsetails**
- viii. h **cypress, podo, ginkgo, spruce, etc**
- ix. I **cypress, podo, ginkgo, spruce, etc**

5. Use either monocotyledonous plants or dicotyledonous to complete the sentences below.

- a) They have taproot system **dicotyledonous plants**
- b) They have fibrous root system **monocotyledonous plants**
- c) They have parallel leaf venation **monocotyledonous plants**
- d) They have network leaf venation **dicotyledonous plants**
- e) They undergo epigeal germination **dicotyledonous plants**
- f) They undergo hypogeal germination **monocotyledonous plants**

6. How are coniferous plants similar to beans in terms of reproduction?

Both reproduce by means of seeds

7. How are coniferous plants different from beans?

Coniferous plants do not bear flowers while seeds bear flowers

8. What do we call structures in which seeds conifers are found?

Cones

9. How are mosses plants and mushrooms similar?

Both reproduce by means of spores

10. How are mosses plants different from mushrooms?

Mosses plants have chlorophyll while mushrooms have no chlorophyll/mosses plants make their own food while mushrooms do feed on decaying matter

11. Why are ferns called plants yet they do not bear flowers?

They have chlorophyll/they make their own food/they carry out photosynthesis

12. Why are liverworts called non flowering plants?

They do not bear flowers

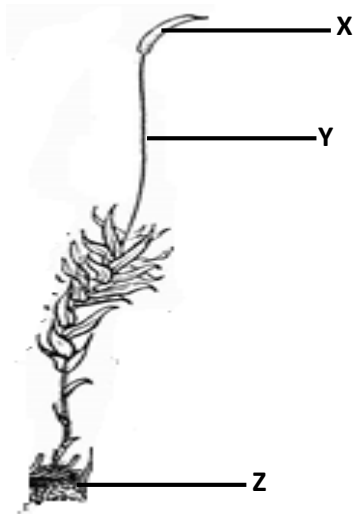
13. In what kind of environment do ferns grow?

Wet/ moist environment

14. Write down any one system of a flowering plant.

Shoot system//root system

15. Use the diagram below to answer questions that follow.



a) Name the plant drawn above.

Moss plant

b) Name the parts marked with letters

i. X **spore**

ii. y stalk/**seta**

case/capsul

z **.rhizoids/roots**

e

c) State the importance of parts marked x and z

x. **To produce and store spores**

z. **To absorb water and mineral salts from the soil**

d) How does the plant in the diagram above reproduce?

By means of spores

16. What enables fruits to ripen?

Ethylene hormone

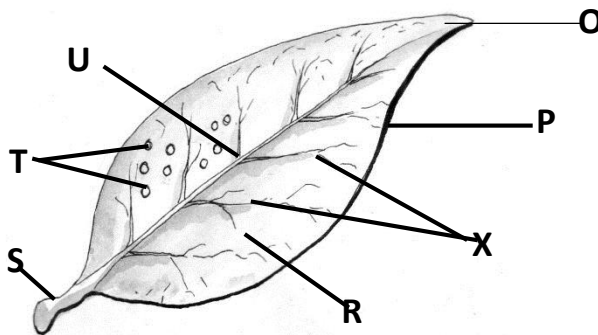
17. What name is given to plant hormones which enable them to grow?

Auxins

18. What do we call the dominant bud on a plant?

Terminal bud

19. The diagram below is of a leaf. Study it carefully and use it to answer questions that follow.



a) Name the parts marked

- | | |
|--|----------------------------|
| i. O <u>apex</u> | v. T <u>stomata</u> |
| ii. P <u>leaf margin</u> | vi. U <u>midrib</u> |
| iii. R <u>lamina/leaf blade</u> | vii. X <u>veins</u> |
| iv. S <u>leaf stalk/petiole</u> | |

b) Which part of a feather is compared with each of the following parts?

X **barbs**

S **quill**

c) State the importance of parts marked with letters

- i) S **attaches the leaf to the stem/branch**
- ii) T **for breathing**
- iii) X **transport water and mineral salts to the lamina/transport food from the lamina to the midrib /provide support to the leaf**
- iv) R **makes food/carries out photosynthesis**

d) Name the part of each of the living things below that has a similar function as part T.

i) Fish **gills**

ii) Insects **spiracles**

iii) Arachnids **lung books**

iv) Tadpoles **gills**

v) Earthworms **moist skin**

vi) Frogs **lungs/moist skin/buccal cavity**

vii) Mammals **lungs**

20. a) Mention two important processes that take place in leaves of plants.

i. **Photosynthesis**

ii. **Transpiration**

b) Why don't plants give off carbon dioxide they produce during the day?

They use it photosynthesis

21. a) Define leaf venation.

Leaf venation is the arrangement of veins in a leaf

b) Name the type of leaf venation shown in each of the diagram below.



a)

network leaf venation



b)

parallel leaf venation

c) Give one example of a plant with the type of leaf venation as shown in

i. A **beans, ground nuts, soya beans, jackfruits, etc.**

ii. B **maize, millet, sorghum, wheat, barley etc.**

End

STAY HOME, STAY SAFE

