

MONDAY, 27TH APRIL 2020

SCIENCE GUIDE FOR LESSON 25

1. Construct a food chain from each of the following lists

a) Owl, fungi, maize, rat

Maize → rat → owl → fungi

b) Man, grass, bacteria, cow

Grass → cow → man → bacteria

c) Eagle, grass, frog, grasshopper, snake

Grass → grasshopper → frog → snake → eagle

d) Snakes, leaves, birds, caterpillars

Leaves → caterpillars → birds → snakes

e) Giraffes, jackals, lions, leaves

Leaves → giraffes → lions → jackals

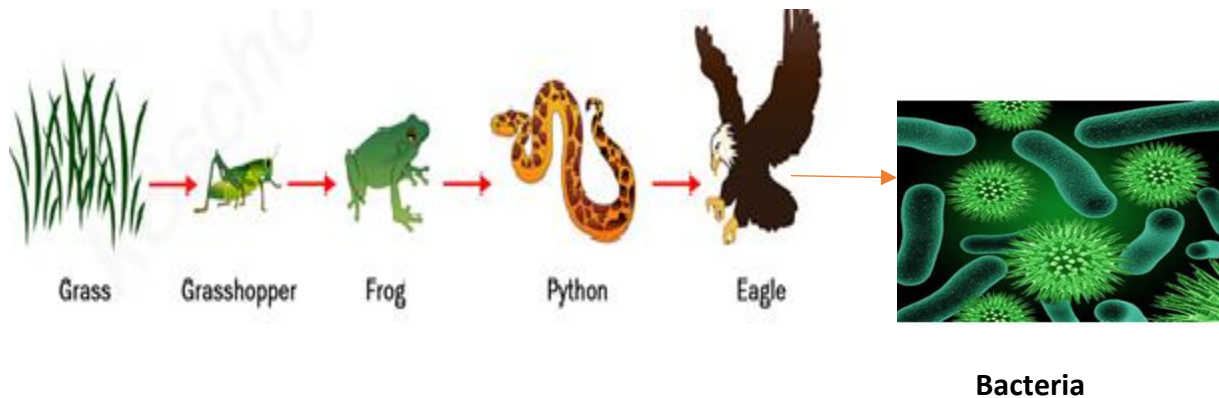
f) Fox, grass, sun, chicken, fungi, grasshopper

Sun → grass → grasshopper → chicken → fox → fungi

g) Owl, rat, rice

Rice → rat → owl

2. Study the food chain below carefully and use it to answer the following questions



a) To which component of a food chain does each of the organisms below belong;

I. Grass

Producer

II. Grasshopper

Primary consumer

III. Frog

Secondary consumer

IV. Eagle

Tertiary consumer

V. Bacteria

Decomposer

b) How do eagles get energy from grass?

By feeding on snakes

c) What would happen to frogs if all pythons died?

They would multiply and increase in number

d) Give a reason for your answer in c above.

There would be no animal to prey on them

e) What would happen to pythons if all frogs died?

They would starve to death

f) Give a reason for your answer in e above

Due to lack of food

g) Mention one organism which can be used to replace bacteria

Fungi

3. What is the disadvantage of an organism feeding in a food chain?

The animal has only one source of food

4. State one advantage of an organism feeding in a food web

An animal in a food web has alternative sources of food//an animal has more than one source of food

5. Give the meaning of each of the following terms;

a) Ecosystem

An ecosystem refers to all living things and non living things that interact with each other in a given area

b) Biodiversity

Biodiversity refers to all plants and animals in the on earth or in a given area

c) Biomass

Biomass refers to the amount of living mater in a given habitat

d) Aquatic life

Aquatic life are plants animals that live in water

e) Terrestrial life

Terrestrial life are plants and animals that live on land

f) Ecology

Ecology is the study of how organisms interact with one another and with their physical environment

6. State the role of each of the following components of a food chain

a) Producers

To make food

b) Decomposers

To breakdown organic matter to form humus

7. How do secondary consumers get energy from producers

By feeding on primary consumers

8. How do tertiary consumers get energy from producers?

By feeding on secondary consumers

9. Give any two examples of ecosystems

Swamps

Ponds

Forest etc.

10. How are plants able to get sunlight energy from the sun?

By the help of chlorophyll/ Plants have chlorophyll which helps them to trap sunlight

11. By what process do plants convert sunlight from the sun to chemical energy?

Photosynthesis