

ECOSYSTEMS
SUBJECT: BIOLOGY
CHAPTER: 4
PYRAMID OF NUMBERS AND PYRAMID OF BIOMASS.
PERIOD-3

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

- Student will be able to understand the meaning of food chain and food web.
- Student will be familiarized with the pyramid number and pyramid biomass.
- They will be able to analyze various trophic level .
- Learners will be sensitized about the difference between food chain and food pyramid.



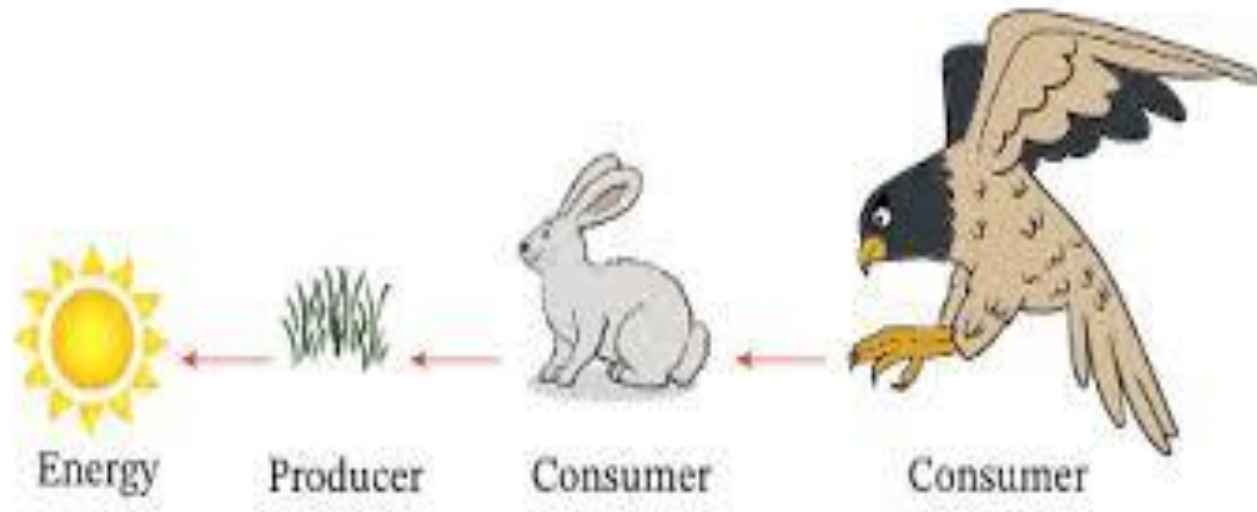
WARM UP QUESTIONS



- Define living and nonliving.
- Categorize the single celled and multi-celled organisms.
- Identify the single celled, multi-celled organisms.
- list the categories of living and non-living organisms.

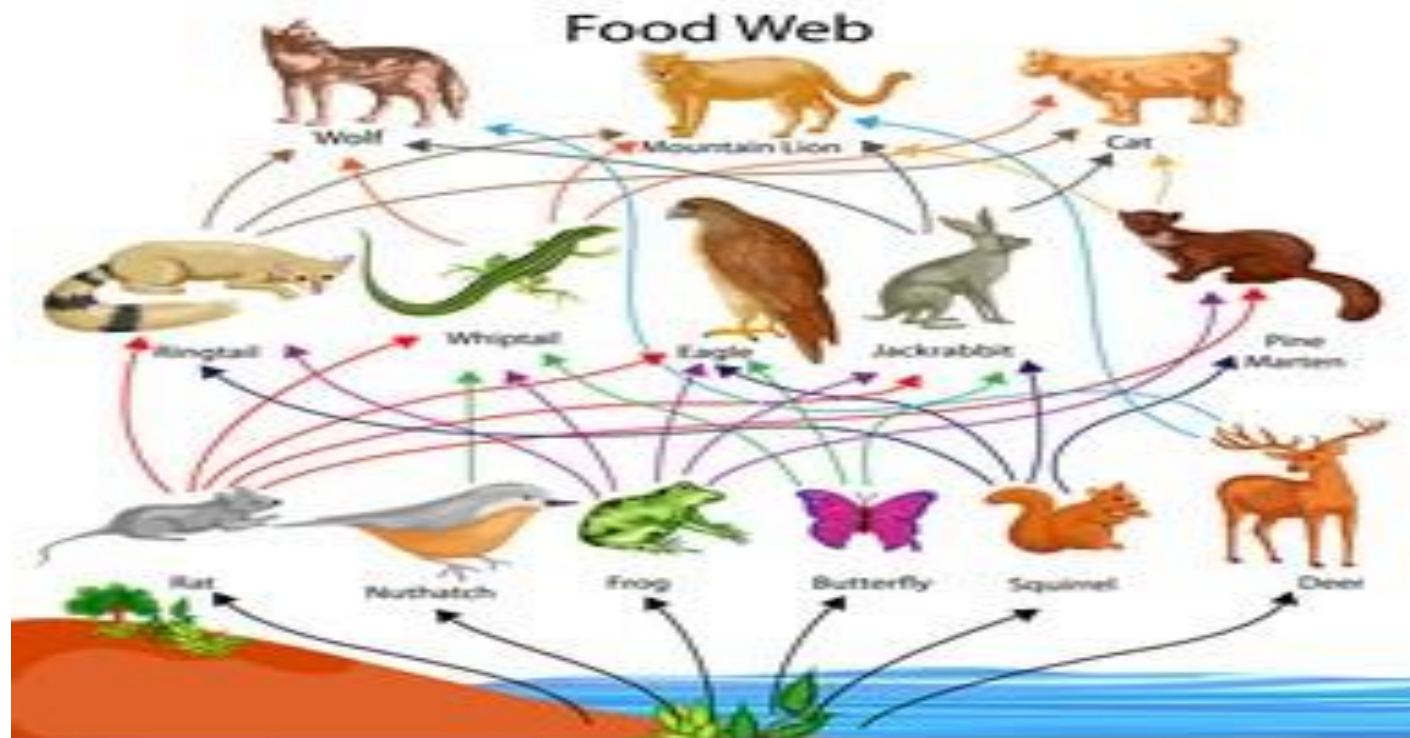
FOOD CHAINS

- The sequence of transfers of matter and energy in the form of food from organism to organism.



FOOD WEBS

- A food chain is a series of organisms that eat one another so that energy and nutrients flow from one to the next.

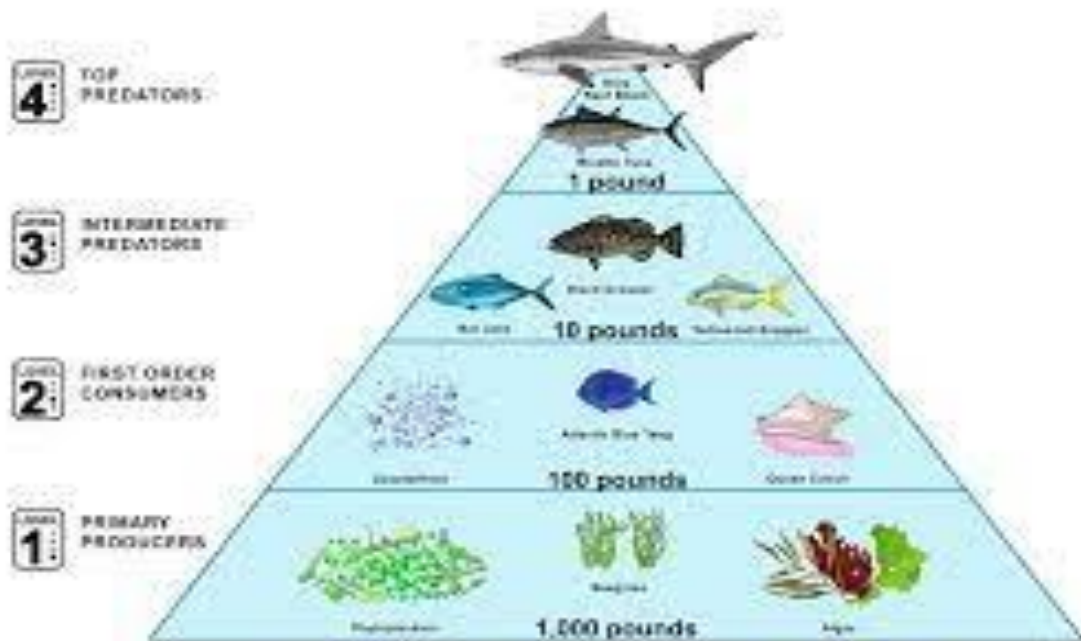


ADVANTAGES OF FOOD WEBS

- Permit alternative foods.
- Ensures a better chance of survival of an organism
- Provides more stability to an ecosystem than a food chain.

FOOD PYRAMIDS

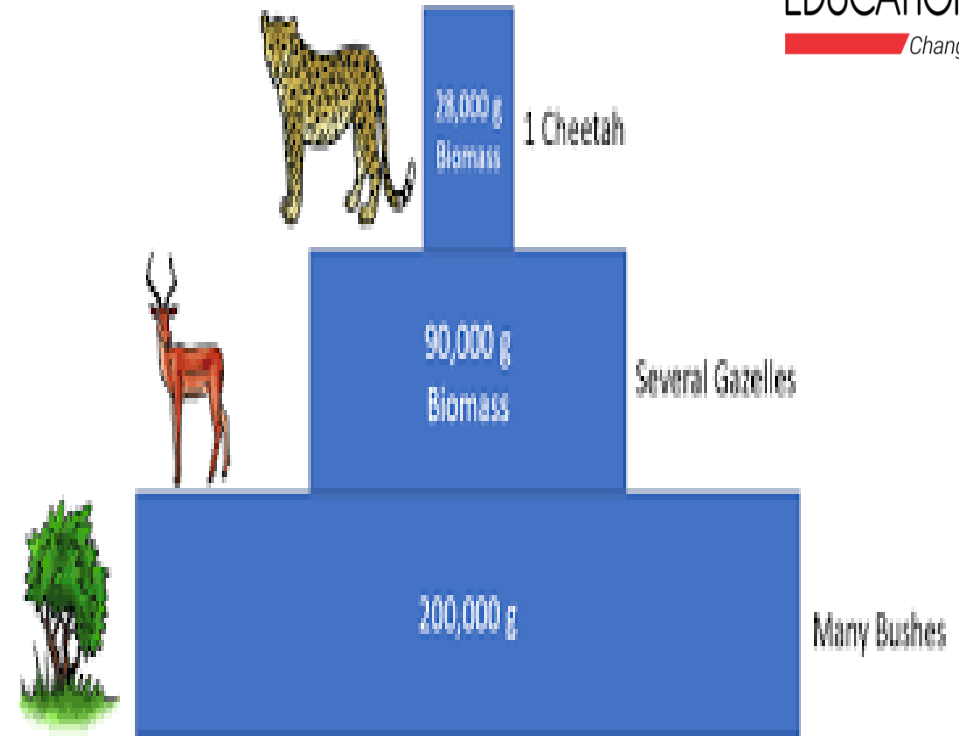
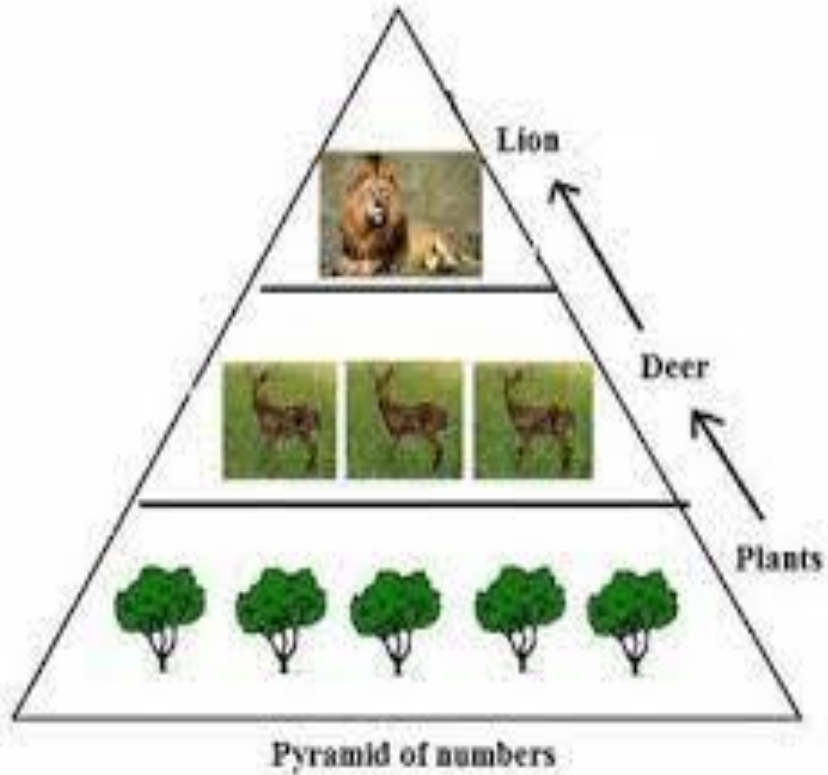
- More commonly known as an energy pyramid, a food pyramid takes the food chain but uses it to show how energy moves through a community.



- <https://www.youtube.com/watch?v=rC8TwL49RFA>



PYRAMID OF NUMBERS AND PYRAMID OF BIOMASS.



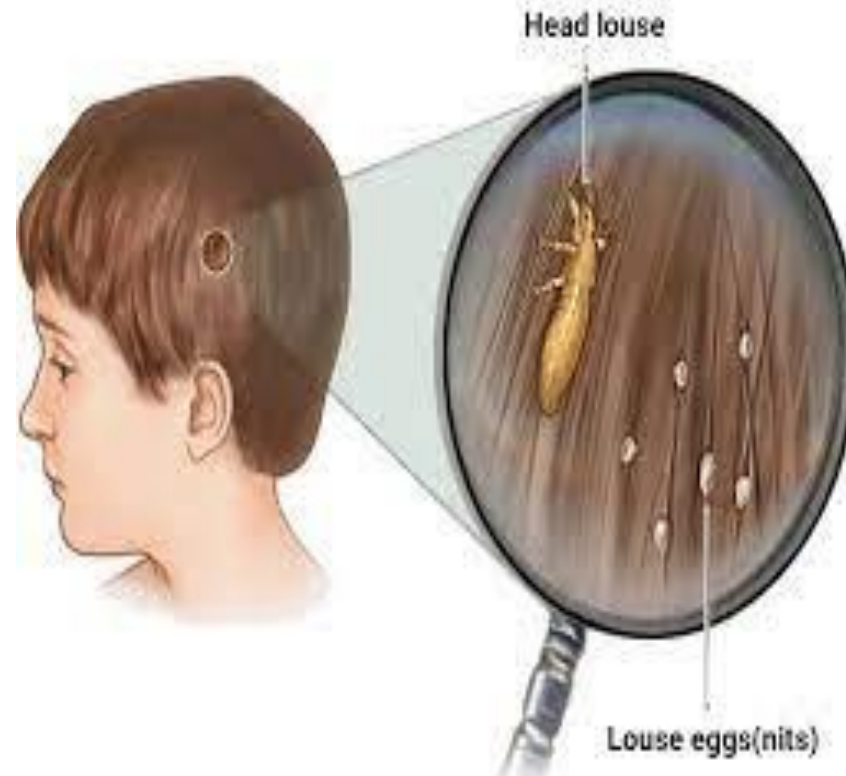
SYMBIOSIS

- Symbiosis is the combination of two Greek words 'Sym' means 'with' and 'biosis' means 'living', which means living together. In symbiosis or mutualism two different types of organisms live and work together for their mutual benefit from each other.



PARASITISM

- Parasitism, relationship between two species of plants or animals in which one benefits at the expense of the other, sometimes without killing the host organism.



PREDATION

- Predation is a biological interaction where one organism, the predator, kills and eats another organism, its prey.



FLORA AND FAUNA



- The word "flora" refers to the plants occurring within a given region as well as to the publication of scientific descriptions of those plants.
- Animals, especially the animals in a particular area, can be referred to as fauna .

TROPICAL RAIN FOREST

- Flora-evergreen trees, bamboos, ferns, shrubs.
- Fauna- jungle cats, leopards, monkeys, flying squirrels , snakes, centipeds, millipedes, many insects, snails etc.

TEMPORATE DECIDUOUS FOREST

- Flora- teak, sandalwood ,sal
- Fauna-moths, beetles, deer, wolves,foxes

CONIFEROUS FORESTS

- Flora-fir and pine trees
- Fauna-squirrel,deer,goat,wolves, robin ,sparrow

GIR FORESTS

- Flora-peepal, acacia,neem
- Fauna- crows , kites, cat, rat ,dog,vultures

JIM CORBETT NATIONAL PARK

- Flora- pine
- Fauna- tiger

JALADPARA SANCTUARY

- Flora-banyan trees
- Fauna- rhinoceros.

RISKS TO ECOSYSTEM

- burning of fossil fuels.
- deforestation.
- hunting of animals, poaching, etc.
- wastage of water.

ECOSYSTEM CONSERVATION

- (i) Forest should be reserved and more and trees should be planted across the region especially in those areas where deforestation takes place.
- (ii) Wildlife must be protected by enacting laws and creating awareness among people.
- (iii) Starting various projects to save endangered species of plants and wildlife



HOME ASSIGNMENT

Q1. What is food web?

Q2. Define the term 'biome'.

Q3. What are the significances of food Chains?

Q4. How do flows of energy occur in tropic level?

Q5. What are the characteristics of energy transfer in the biosphere?

Q6. Why is energy flow considered as unidirectional?



THANKING YOU
ODM EDUCATIONAL GROUP.