



Erasmus+

2020-1-SK01-KA201-078297



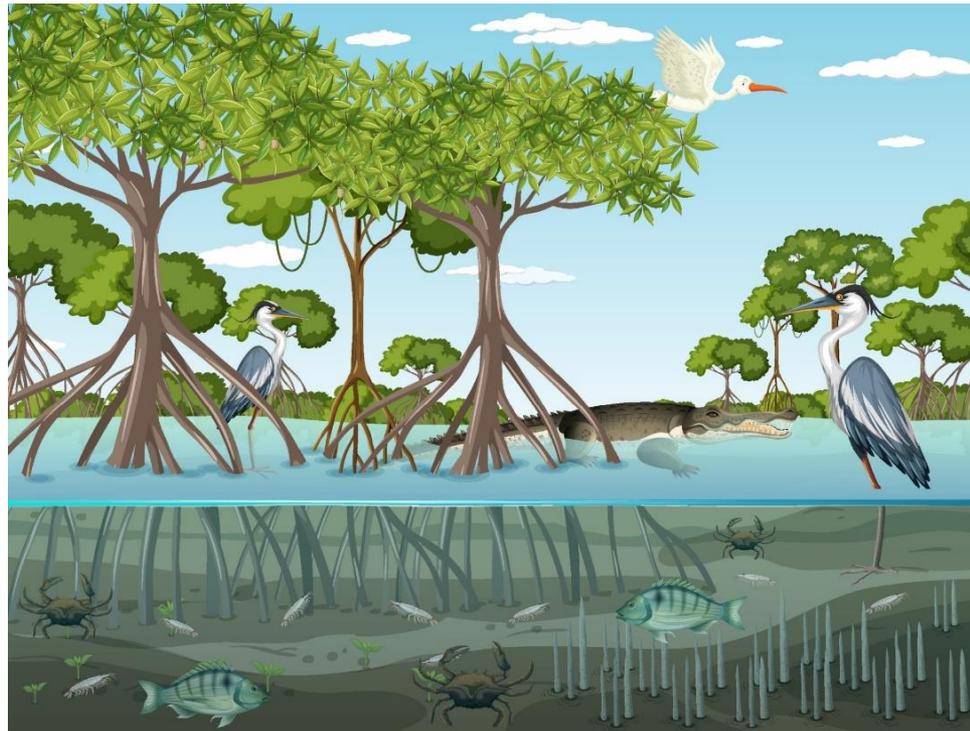
Exploring ecological pyramid

Living environment & living organisms

ECOSYSTEM:



- ❑ individual → population → community → ecosystem
- ❑ ecosystem = biocenosis + biotope



DIVISION OF ECOSYSTEM ORGANISMS



❑ PRODUCERS:

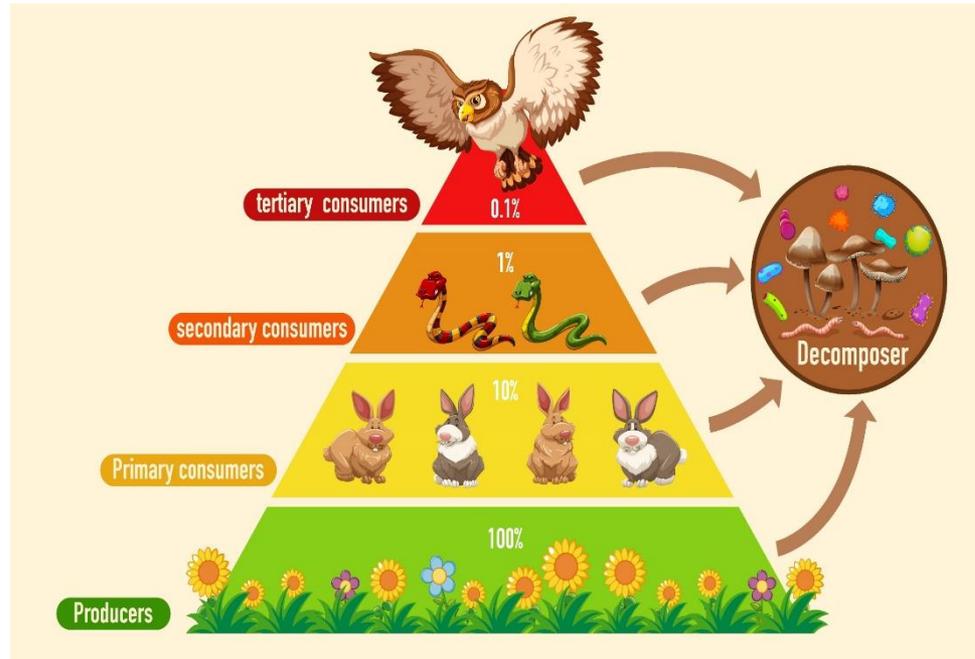
plants

❑ CONSUMERS:

animals

❑ REDUCERS:

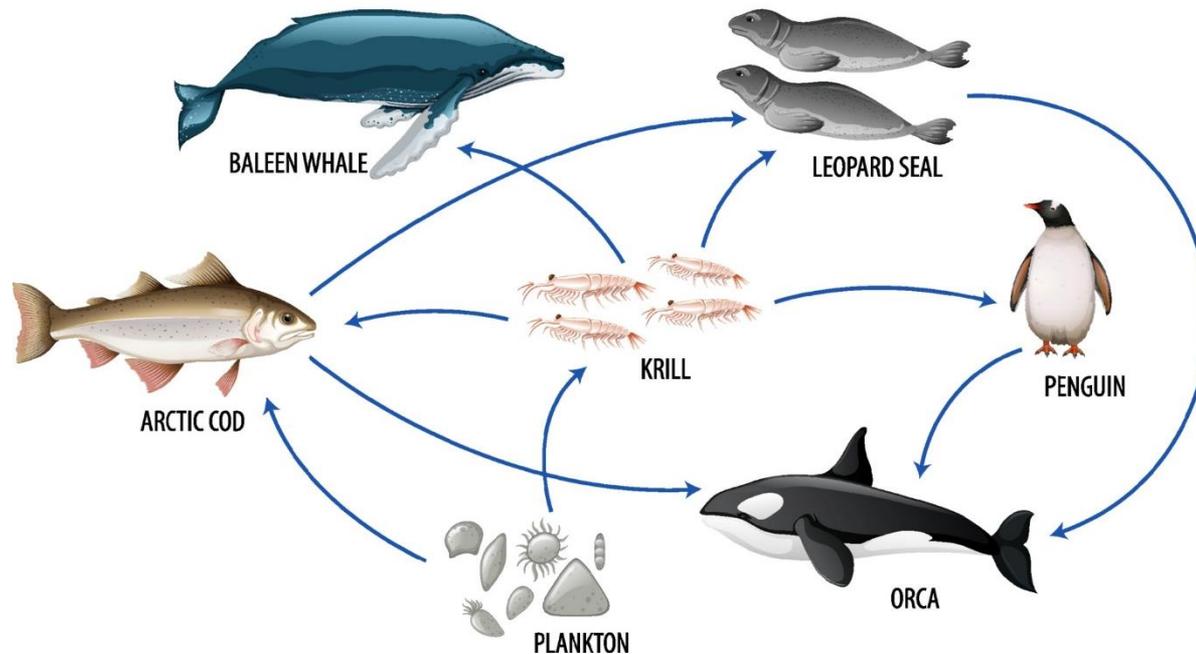
soil bacteria
and fungi



FOOD CHAIN



- the transfer of substances and the flow of energy and information between producers, consumers and reducers



TYPES OF FOOD CHAINS



☐ **grazing - prey:**

the predator - prey relationship

(algae - plankton - small fish - predatory fish – human)

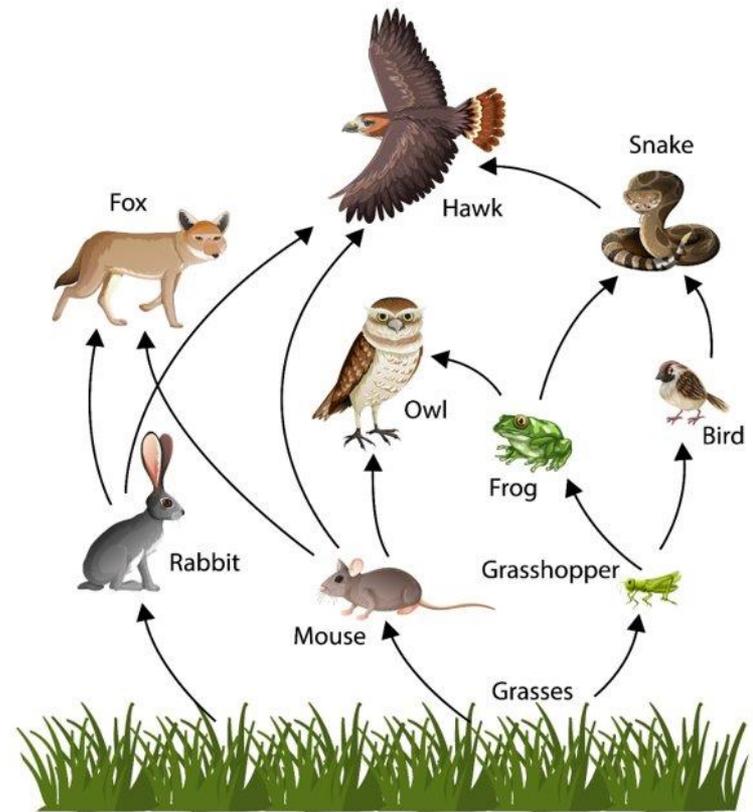
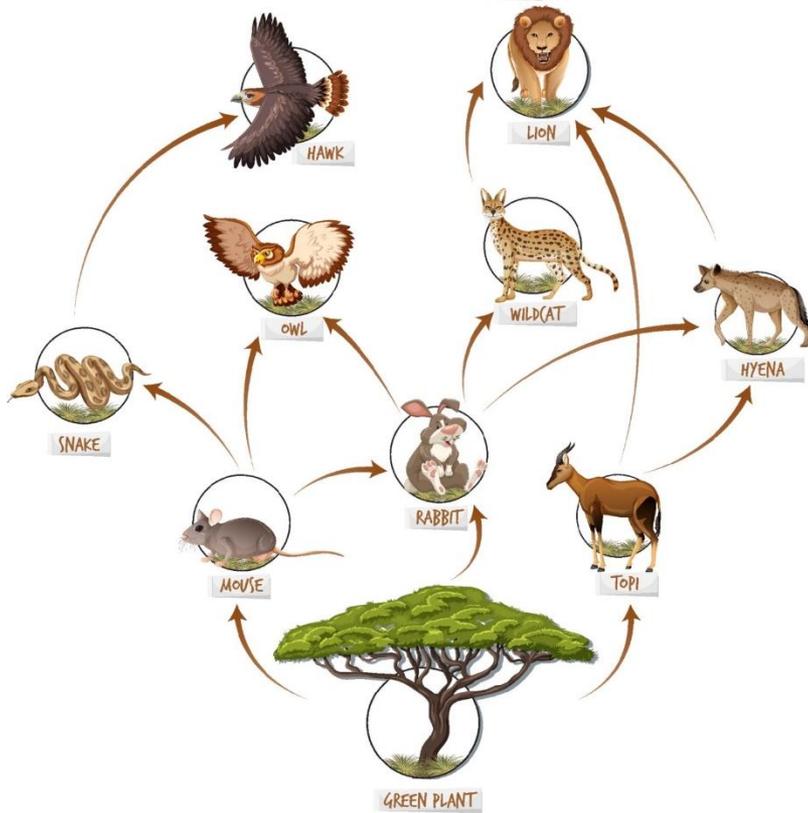
☐ **parasitic:** relationship parasite - host

(a tick - a dog; a flea – a mammal)

☐ **decomposition:** decomposition of dead residues to form humus

(a dead organism - saprophytic insect - microscopic fungi - bacteria)

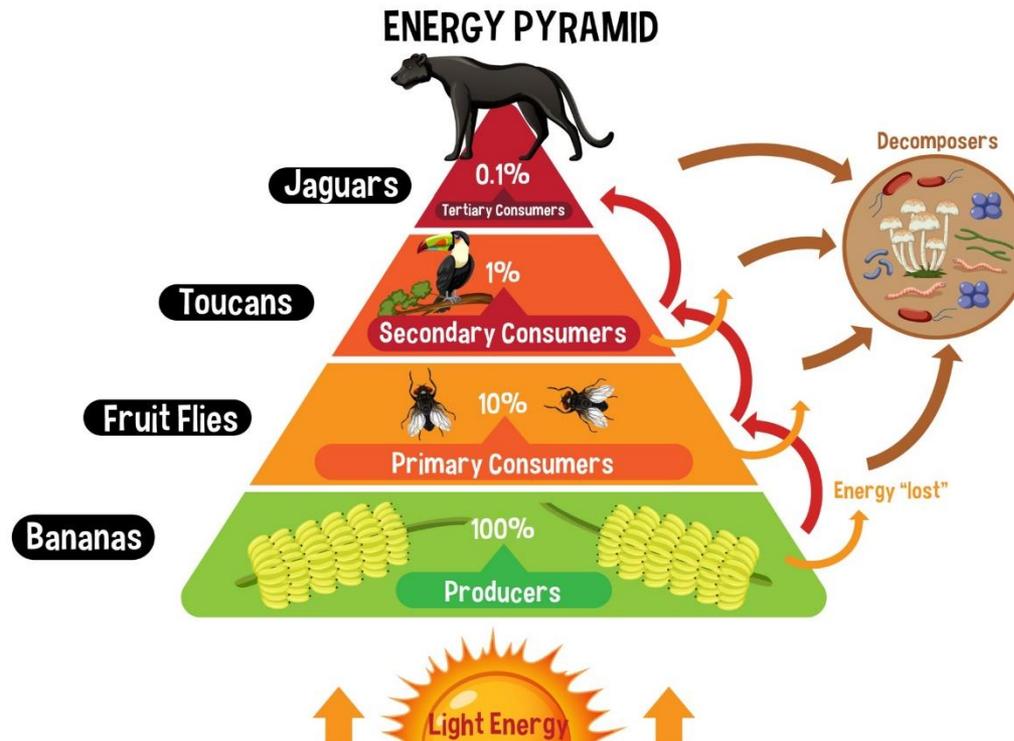
TYPES OF FOOD CHAINS



FOOD PYRAMID



- the circulation of substances and energy in the ecosystem can be expressed graphically in the form of a food ECOLOGICAL pyramid.



PYRAMID OF NUMBERS



- ❑ the base is made up of producers
- ❑ higher level: 1st order consumer
- ❑ next level: 2nd order consumer
- ❑ at the top there is: 3rd order consumer

ECOLOGICAL STABILITY OF THE ECOSYSTEM



- high
- medium
- low
- the coefficient of ecological stability

ECOLOGICAL STABILITY OF THE ECOSYSTEM



- CLIMAX - a stabilized ecosystem with well-established biotic relationships and abiotic factors



ECOSYSTEM STABILITY DISORDER



- ❑ every organism has its place and function in nature, which can be disturbed by various factors
- ❑ negative human activities



ECOSYSTEM STABILITY DISORDER



IT IS NECESSARY TO:

- ❑ **BE AWARE** of the negative consequences of disturbing the natural balance of the ecosystem
- ❑ **PERCEIVE** living nature
- ❑ **UNDERSTAND** the interrelationships between organisms and their environment

PICTURES - USED SOURSES:



<https://www.vecteezy.com/>