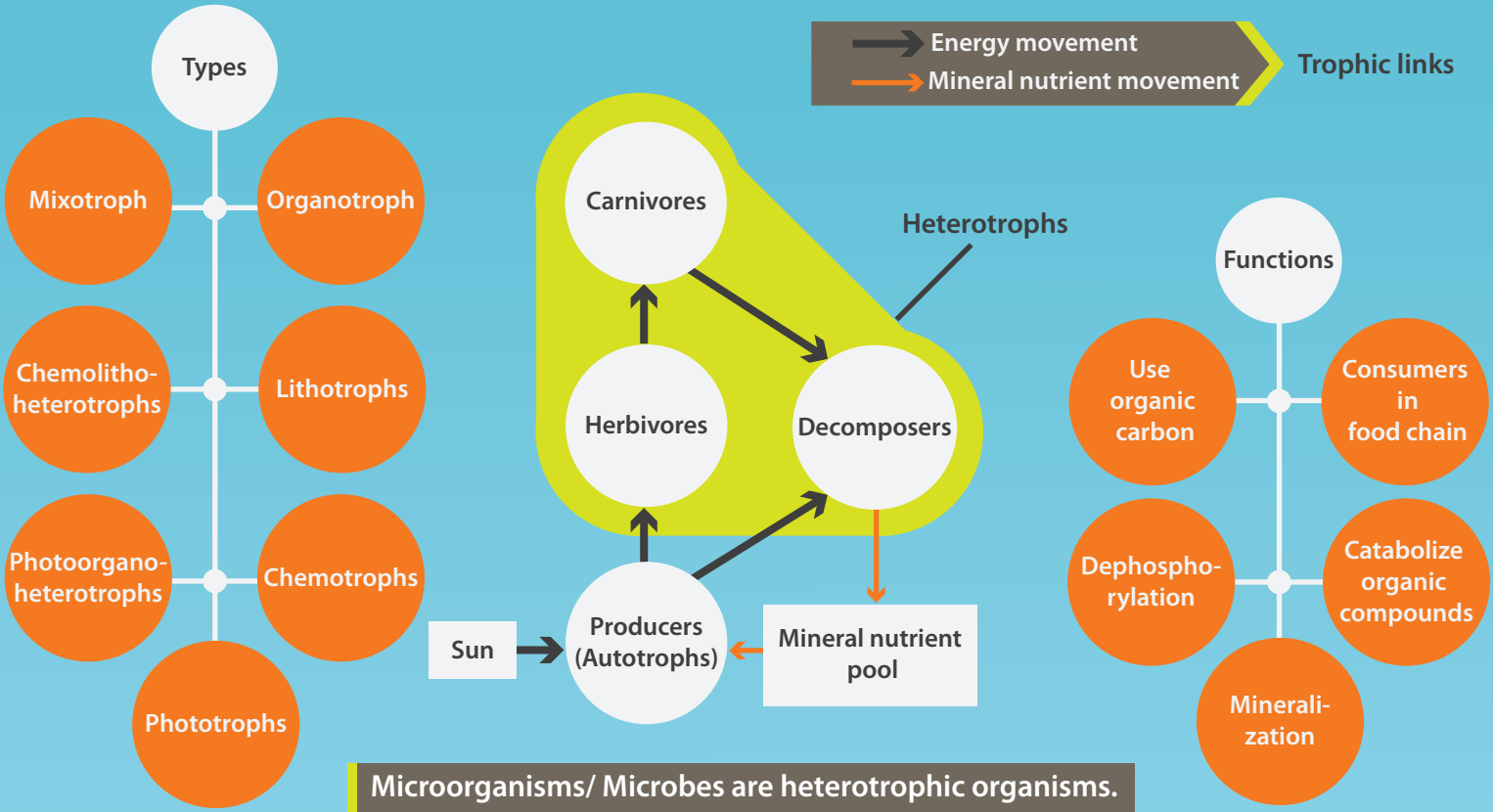


Microorganisms

Heterotrophs

Organisms that cannot prepare their own food & rely on other sources of organic carbon

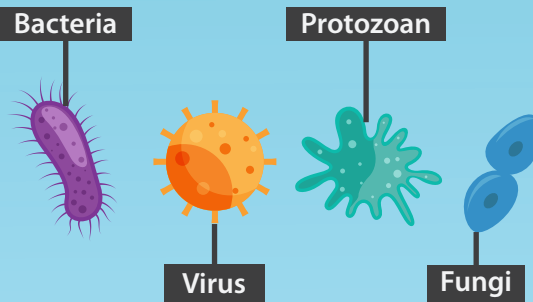


Microorganisms

The most abundant & omnipresent heterotrophic microscopic organisms of planet that inhabited the Earth for billions of years.

- Types**
- Good microbes
 - Bad microbes

Categories of microorganisms

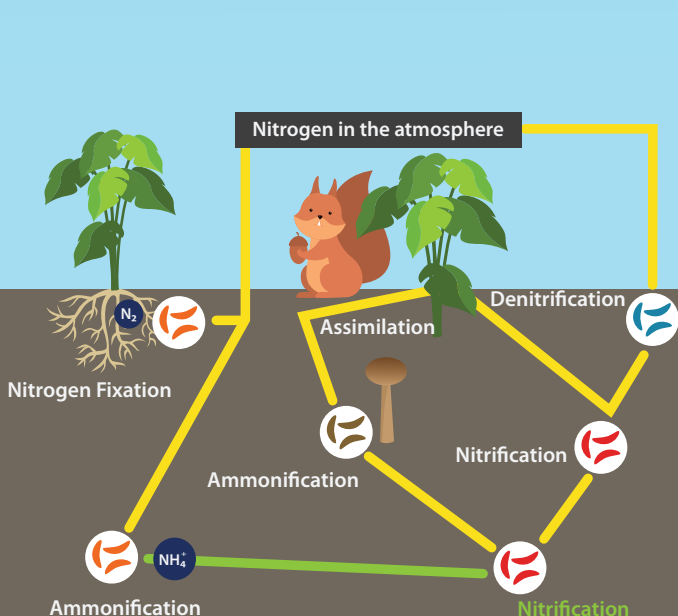


Decomposers

- Group of heterotrophic microorganisms that help in decomposition of dead and decayed organic matter.
- Microbes have several other uses too.

Ecological Importance

Nitrogen cycle: Conversion of atmospheric nitrogen to nitrates



- S1** — Nitrogen fixation: Conversion of atmospheric N_2 to NH_3
- S2** — Assimilation: Absorption of fixed N_2 from soil by roots
- S3** — Ammonification: Generation of ammonia by microbes
- S4** — Nitrification: Conversion of NH_3 to NO_3^- by bacteria
- S5** — De-nitrification: Conversion of NO_3^- to N_2

Importance

- Making inert N_2 available to plants & animals
- Chlorophyll synthesis
- Decomposition of dead organic matter
- Soil enrichment
- Building the structure of nucleic acids