

## Nitrogen Cycle

- Nitrogen (N<sub>2</sub>) makes up 78% of the atmosphere.
- All organisms need nitrogen to build new cells
  - most organisms **can't** use the nitrogen straight from the atmosphere
  - nitrogen-fixing bacteria take nitrogen from the air and put it into chemical compounds that other organisms can use.
- When organisms die, decomposers break down nitrogen from their cells and return it to the soil.
  - Nitrogen-fixing bacteria which live on the roots of plants make nitrates, which are eaten by animals

## Phosphorous Cycle

- Phosphorous is an element that is part of many organisms
- Found in teeth and bones
  - plants get phosphorous from soil and water
  - animals get it from eating plants
- phosphorous enters soil and water due to erosion from rocks and decomposition of other organisms

Excess carbon dioxide, nitrogen, and phosphorous in the atmosphere can cause rain to be acidic (acid rain)