

Grade 9 - Unit 3 – Environmental Chemistry Concepts

*** Medicines from the Environment ***

Nutrients
 - Optimum Amount -
 Macronutrients
 Micronutrients (trace)
Organic (contain carbon)
 Carbs, fats, proteins, nucleic acids
Inorganic

Harmful Human Activities
 Agricultural Waste
 Fuel Combustion
 Industry
 Manufacturing

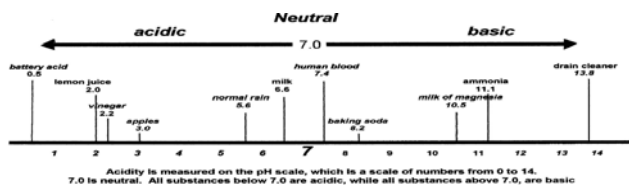
Water
 Chemical Testing (ppm)

Air
 Sulfur Dioxide
 Nitrogen Oxides
 Carbon Monoxide
 Ground-Level Ozone
 Chloroflorocarbons (CFC's)

Soil
 Pesticides
 Heavy Metals
 Toxins

Bioindicator Species

Atmosphere
 Greenhouse Effect
 Enhanced Greenhouse Effect
 Global Warming
 Toxicity



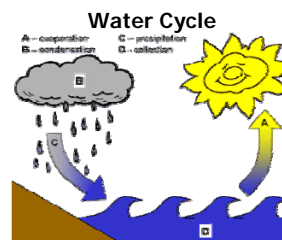
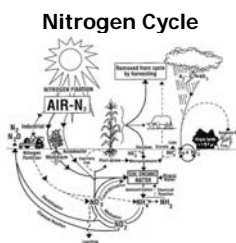
Neutralization



LD50

Chemicals Support or Harm Living Things

Monitoring for Quality

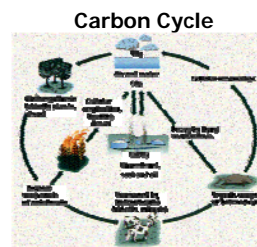
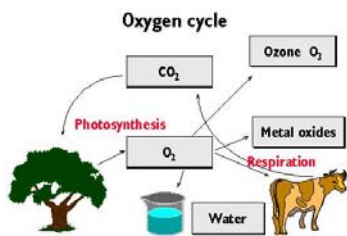


H
C
O
N

Mo Mn Mg Na Se Fe Sn Ca

Environmental Chemicals

Si V B I K Zn Cl Ni Cr Cu S



F
P
O
H

Chemical Transportation

Chemical Hazards

Plants Diffusion Osmosis Active Transport	Animals Ingestion Digestion Absorption	Environment Release Dispersion Deposition Dissolving Dilution Leaching
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Biomagnification	W.H.M.I.S.	Labeling
Bioaccumulation	MSDS	Disposal Sites

Substrate

Changing Chemical Concentrations
 Biodegradation Phytoremediation Photolysis

Storage and Transportation of Dangerous / Hazardous Goods

Government Regulations