

## Biology Vocabulary

### Nature of Life, Science of Biology

Science  
 Observation  
 Data  
 Inference  
 Hypothesis  
 Spontaneous generation  
 Controlled experiment  
 Manipulated variable (independent variable)  
 Responding variable (dependent variable)  
 Theory  
 Biology  
 Cell  
 Sexual reproduction  
 Asexual reproduction  
 Metabolism  
 Stimulus  
 Homeostasis  
 Evolution  
 Metric system  
 Microscope  
 Compound light microscope  
 Electron microscope  
 Cell culture  
 Cell fractionation

### Nature of Life, Chemistry of Life

Atom  
 Nucleus  
 Electron  
 Element  
 Isotope  
 Compound  
 Ionic bond  
 Ion  
 Covalent bond  
 Molecule  
 Van der waal's forces  
 Cohesion  
 Adhesion  
 Mixture  
 Solution  
 Solute  
 Solvent  
 Suspension  
 pH scale  
 acid  
 base  
 buffer  
 monomer  
 polymer  
 carbohydrate  
 monosaccharide  
 polysaccharide  
 lipid  
 nucleic acid  
 nucleotide  
 ribonucleic acid (RNA)

deoxyribonucleic acid (DNA)  
 protein  
 chemical reaction  
 reactant  
 product  
 activation energy  
 catalyst  
 enzyme  
 substrate

### Ecology (The Biosphere)

Ecology  
 Biosphere  
 Species  
 Population  
 Community  
 Ecosystem  
 Biome  
 Autotroph  
 Producer  
 Photosynthesis  
 Chemosynthesis  
 Heterotroph  
 Consumer  
 Herbivore  
 Carnivore  
 Omnivore  
 Detrivore  
 Food chain  
 Decomposer  
 Food web  
 Trophic level  
 Ecological pyramid  
 Biomass  
 Biogeochemical cycle  
 Evaporation  
 Transpiration  
 Nutrient  
 Nitrogen fixation  
 Denitrogen fixation  
 Primary productivity  
 Limiting nutrient  
 Algae bloom

### Ecology (Ecosystems and Communities)

Weather  
 Climate  
 Greenhouse effect  
 Polar zone  
 Temperate zone  
 Tropical zone  
 Biotic factor  
 Abiotic factor  
 Habitat  
 Niche  
 Resource  
 Competitive exclusion principle  
 Predation  
 Symbiosis  
 Mutualism  
 Commensalisms

Parasitism  
 Ecological succession  
 Primary succession  
 Pioneer species  
 Secondary succession  
 Biome  
 Tolerance  
 Microclimate  
 Canopy  
 Understory  
 Deciduous  
 Coniferous  
 Humus  
 Taiga  
 Permafrost  
 Plankton  
 Phytoplankton  
 Zooplankton  
 Wetland  
 Estuary  
 Detritus  
 Salt marsh  
 Mango grove swamp  
 Photic zone  
 Aphotic zone  
 Zonation  
 Coastal ocean  
 Kelp forest  
 Coral reef  
 Benthos

### Ecology (Populations)

Population density  
 Immigration  
 Emigration  
 Exponential growth  
 Logistic growth  
 Carrying capacity  
 Limiting factor  
 Density dependent limiting factor  
 Predator prey relationship  
 Density independent limiting factor  
 Demography  
 Demographic transition  
 Age structure diagram

### Ecology (Humans and the Biosphere)

Agriculture  
 Monoculture  
 Green revolution  
 Renewable resource  
 Nonrenewable resource  
 Sustainable development  
 Soil erosion  
 Desertification  
 Deforestation  
 Aquaculture  
 Smog  
 Pollutant  
 Acid rain  
 Biodiversity

Ecosystem diversity  
 Species diversity  
 Genetic diversity  
 Extinction  
 Endangered species  
 Habitat fragmentation  
 Biological magnification  
 Invasive species  
 Conservation  
 Ozone layer  
 Global warming

### Cells (Structure and Function)

Cells  
 Cell theory  
 Nucleus  
 Eukaryote  
 Prokaryote  
 Organelle  
 Cytoplasm  
 Nuclear envelope  
 Chromatin  
 Chromosome  
 Nucleolus  
 Ribosome  
 Endoplasmic reticulum  
 Golgi apparatus  
 Lysosome  
 Vacuole  
 Mitochondrion  
 Chloroplast  
 Cytoskeleton  
 Centriole  
 Cell membrane  
 Cell wall  
 Lipid bilayer  
 Concentration  
 Diffusion  
 Equilibrium  
 Osmosis  
 Isotonic  
 Hypertonic  
 Hypotonic  
 Facilitated diffusion  
 Active transport  
 Endocytosis and exocytosis  
 Phagocytosis and Pinocytosis  
 Cell specialization  
 Tissue, organ and organ system

### Cells (Photosynthesis)

Autotroph  
 Heterotroph  
 Adenosine triphosphate (ATP)  
 Photosynthesis  
 Pigment  
 Chlorophyll  
 Thylakoid  
 Photosystem