

AP Biology Summer Assignment

The terms/concepts listed below are all from your first year biology class. The terms are organized according to the unit in which they were taught. Reviewing the terms and understanding how they are related will be crucial to your success in AP Biology. Your assignment is to define the following terms and create a concept map for each group of terms. Feel free to add extra terms if they make your concept map more meaningful.

A concept map is a nonlinear diagrammatic representation of meaningful relationships between concepts. The concepts are linked by words that describe the relationships or connections between the concepts. Concept maps are used in various ways to enhance meaningful learning.

On the back of this page there is an example of a concept map on cell structure and function.

Evolution

Natural Selection
Population
Variation
Adaptation
Fitness
Environment
Reproduction
Natural Resource
Competition

Ecology

Species
Population
Community
Ecosystem
Interactions
Abiotic Factors
Biotic Factors
Carbon Cycle
Nitrogen Cycle

Biological-

Macromolecules

Polymers
Monomers
Carbohydrates
Nucleic Acids
Proteins
Lipids
Nucleotides
Amino Acids
Simple Sugars
Glycerol/Fatty Acid

Cell Energy

Photosynthesis
Respiration
Fermentation
Carbon Dioxide
Water
Oxygen
Glucose
ATP

Molecular

Biology/Genetics

Chromosomes
DNA
Genes
Proteins
Genetic Code
Enzymes
Mutations
Traits
Alleles
Genotype
Phenotype
Gene Expression

Cell Biology

Cell
Organelles
Cell Membrane
Mitosis
Meiosis
Diploid
Haploid
Sexual reproduction

