

Cellular Biology Quick Study Guide

Essential Vocabulary & Key Concepts

* When studying...don't just define the word, give an example!

Chapter 2 - Biochemistry

acid (acidic)
amino acid
base (basic)
carbohydrate
disaccharide
enzyme
fat
lipid
lock-and-key model
monomer
monosaccharide
nucleic acid
nucleotide
pH
polymer
polysaccharide
protein
What makes Carbon unique?

Chapter 7 - Cell Theory and Structure

cell
cell (plasma) membrane
cell wall
chloroplast

chromosome
cytoplasm
cytoskeleton
eukaryote
Golgi apparatus (Golgi body)
lysosome
microscope
mitochondrion
nuclear envelope (nuclear membrane)
nucleus
nucleolus
organelle
prokaryote
ribosome
rough endoplasmic reticulum
smooth endoplasmic reticulum
vacuole

Chapter 7 - Cell Membranes and Transport

active transport
diffusion
endocytosis
exocytosis
facilitated diffusion
hypertonic
hypotonic
isotonic

osmosis
phagocytosis
pinocytosis
protein channel
simple (passive) diffusion

Chapter 8 & 9 - Cellular Energy Processes

autotroph
cell respiration
chlorophyll
chloroplast
glycolysis
heterotroph
mitochondria
photosynthesis
pigment

Chapter 10 & 11 - Cell Growth & Reproduction

anaphase
cell cycle
cell division
centriole
centromere
chromatid
chromosome
crossing over
cytokinesis

diploid
egg
fertilization
gamete
G1 phase
G2 phase
haploid
interphase
Law of Independent Assortment
meiosis
metaphase
homologous chromosomes
multicellular
prophase
S phase
sister chromatid
sperm
spindle fibers
telophase
unicellular
zygot
tetrad

Chapter 11 - Genetics

allele
chromosome
codominance
complete dominance
dominant
gamete
gene
genotype
Gregor Mendel
heterozygous
homozygous
hybrid
incomplete dominance
Law of Independent Assortment
monohybrid cross
pedigree
phenotype
Punnett square
recessive
trait
true (pure) breeding

Chapter 12 & 14.1 - DNA & Human Heredity

codon
DNA
mRNA (messenger)
mutation
nitrogenous base
nucleotide
phosphate
replication
ribosome
RNA
transcription
translation
autosomes
chromosomal mutation
karyotype
sex chromosomes
Watson & Crick