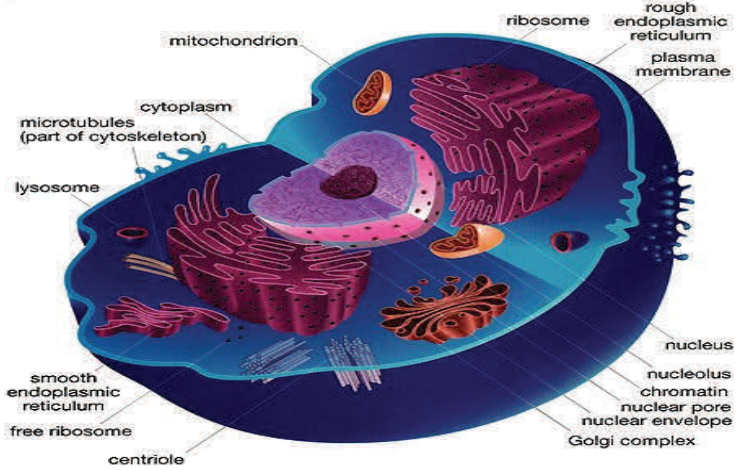
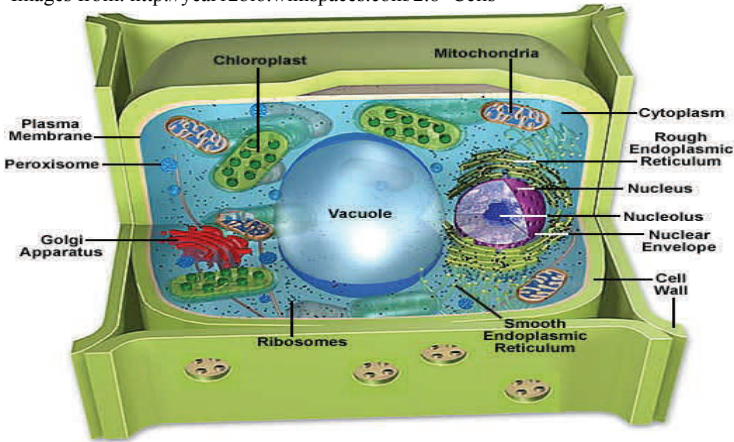


Reference ♦ BIOLOGY ♦ Information



Cross section of animal cell (top) and plant cell (bottom)

Images from: <http://year12bio.wikispaces.com/2.8+Cells>



10 ⁿ	Prefix	Symbol	Decimal
10 ²⁴	yotta-	Y	1 000 000 000 000 000 000 000 000
10 ²¹	zetta-	Z	1 000 000 000 000 000 000 000
10 ¹⁸	exa-	E	1 000 000 000 000 000 000
10 ¹⁵	peta-	P	1 000 000 000 000 000
10 ¹²	tera-	T	1 000 000 000 000
10 ⁹	giga-	G	1 000 000 000
10 ⁶	mega-	M	1 000 000
10 ³	kilo-	k	1 000
10 ²	hecto-	h	100
10 ¹	deca-	da	10
10 ⁰	(none)	(none)	1
10 ⁻¹	deci-	d	0.1
10 ⁻²	centi-	c	0.01
10 ⁻³	milli-	m	0.001
10 ⁻⁶	micro-	μ	0.000 001
10 ⁻⁹	nano-	n	0.000 000 001
10 ⁻¹²	pico-	p	0.000 000 000 001
10 ⁻¹⁵	femto-	f	0.000 000 000 000 001
10 ⁻¹⁸	atto-	a	0.000 000 000 000 000 001
10 ⁻²¹	zepto-	z	0.000 000 000 000 000 000 001
10 ⁻²⁴	yocto-	y	0.000 000 000 000 000 000 000 001

Six Kingdoms

Eubacteria
Archaeobacteria
Protists
Fungi
Plants
Animals

Levels of Classification

Kingdom
Phylum
Class
Order
Family
Genus
Species

Diffusion: the movement of substances across the cell membrane from an area of high concentration to an area of lower concentration

Osmosis: the diffusion of water molecules through a selectively permeable membrane from an area of high concentration to an area of lower water concentration

Facilitated transport (facilitated diffusion): occurs when a carrier molecule embedded in the cell membrane transports a substance across the membrane

Prokaryotes:

Single-celled organisms that lack internal structures surrounded by membranes. They lack a true nucleus.

Examples:

Bacteria
Archaea

Eukaryotes:

Single-celled and multi-cellular organisms that have cells containing internal membrane-bound structures. They have a true nucleus containing the cell's DNA

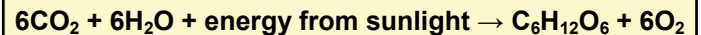
Examples:

Plants
Animals
Mushrooms (fungi)
Amoebas (protists)

Cellular Respiration



Photosynthesis



Some examples of Environmental Factors

Biotic	Abiotic
Plants Animals Bacteria	Climate Light Soil Water

Active Transport: a process that drives large molecules across the cell membrane from a region of lower concentration to a region of higher concentration

Endocytosis: a process in which a cell surrounds and takes in material from its environment

Exocytosis: a process by which a cell surrounds and removes materials from inside the cell

***** All Require Energy *****