Cells Unit Glossary

Prokaryote

Eukaryote

Unicellular

Cell membrane

Plasma membrane

Phospholipid bi-layer

Hydrophobic

Hydrophilic

Integral proteins

Peripheral proteins

Glycoprotien

Channel protein

Carrier protein

Extracellular space

Intracellular

Receptor

Enzymes

**\*all organelles + structures**

(structure and function)

Double membrane

\*inner membrane

\*outer membrane

Grannum

Thylakoid

Stroma

Cristae

Matrix

synthesis

Plasmid

Nucleoid

Cytosol

Autotroph

Heterotroph

Photosynthesis

Aerobic respiration

Anaerobic respiration (fermentation)

Alcohol fermentation

Lactic acid fermentation

ATP

ADP

Inorganic phosphate

Hydrolysis

Metabolism

Selective permeability

Simple diffusion

Facilitated diffusion

Active transport

Passive transport

Concentration gradient

Osmosis

Solute

Solvent

Isotonic

Hypertonic

Hypotonic

Flaccid

Plasmolysis

Turgor pressure

Lysis

Endocytosis

Exocytosis

Surface area to volume ratio (SA:V)

Metabolic pathway

Intermediate compounds

Harmful chemicals

Cell division

Parent cell

Daughter cell

Binary fission

Cross wall

Mitosis (phases)

Cytokinesis

Chromosome

Gene

Allele

Centromere

Sister chromatids

Condensed

Centrioles

Equator

Spindle fibres

Contractile ring

Cell plate

Asexual reproduction

Sexual reproduction

Gametes

Maternal

Paternal

Germ-line cells

Meiosis I

Meiosis II

Haploid

Diploid

Homologous chromosomes

Mutation

Crossing over

Independent assortment

Random fertilization

Interphase

G1

S

G2

Cell cycle

Checkpoints

**Internal factors**

Cell size

Genes and gene products

Cdks

Cyclin

Cdk-Cyclin complex

SPF & MPF

**External factors**

Nutrient dependency

Anchorage dependency

Density dependency

Hormones

* Growth hormone
* Growth factor

Cancer

Carcinogen

Tumor suppressor gene

Proto-oncogene (+oncogene)

Metastasis

Cell culture

In vitro – outside the organism

In vivo – with/in the whole organism

Cell differentiation

Stem cell

Dissection (types)

Cloning

Micropropagation

 Explant; callus

Applications

Limitations