

## **Biology 1,2**

### **UNIT 4 VOCABULARY**

**covalent bond**- a strong chemical bond that involves sharing a pair of electrons between atoms in a molecule (between sugar and phosphate or sugar and nitrogenous base)

**DNA**- Deoxyribonucleic acid, a nucleic acid that carries the genetic information in the cell and is capable of self-replication

**hydrogen bond**- A weak chemical bond in which a hydrogen atom of one molecule is attracted to an electronegative atom, especially a nitrogen or oxygen atom (between two nitrogenous bases)

**nucleotide**- monomer of DNA consisting of a phosphate group attached to a sugar which has a nitrogen base attached to it

**double helix**- a pair of parallel helices intertwined about a common axis, especially that in the structure of the DNA molecule

**complimentary base pairing**- The standard arrangement of bases in nucleotides in relation to their opposite pairing, such as thymine being paired with adenine and cytosine paired with guanine

**daughter strand**-during DNA replication, the newly made strand

**semi-conservative replication**- process of DNA synthesis, in which the two original strands of the molecule separate, and each acts as a template on which a new complementary strand is made

**binary fission**- the form of asexual reproduction and cell division used by all prokaryotes

**asexual reproduction**- reproduction without the union of gametes resulting in the formation of two identical cells

**cell cycle**- the series of events involving the growth, replication, and division of a eukaryotic cell

**chromosome**- A strand of DNA in the nucleus of eukaryotic cells that carries the genes and functions in the transmission of hereditary

**interphase**-the phase between cell divisions in which the cell grows, divides its DNA and is metabolically active

**mitosis**- division of the nucleus

**Cytokinesis**- division of the cytoplasm

**sister chromatid**- 2 identical copies of a chromatin connected by a centromere

**Cancer**- disease caused by an uncontrolled division of abnormal cells in a part of the body

**Mutagen**- An agent, such as radiation or a chemical substance, that causes genetic mutation

**Mutation**-a change in DNA

**risk factor**-something that increases the chance of something occurring, for example cancer