

Bangladesh International School, English Section Riyadh

BIOLOGY

Grade –8

Chp -1 Classification

Define the following.

- I. **Classification:** Classification means putting things into groups. It is the grouping of organisms on the basis of similarities and differences.
- II. **DNA:** Deoxyribo nucleic acid is the chemical from which our chromosomes are made. It is the genetic material, passed on from one generation to the next.
- III. **Taxonomy:** It is the science which deals with classification.
- IV. **Morphology:** The branch of biology which deals with the structures of the bodies of the organisms which are closely related to each other:
- V. **Anatomy:** The branch of biology which deals with detailed body structure, which could be determined by dissection.
- VI. **Common ancestors:** The ancestors that two or more descendants have in common are called common ancestors. The common ancestor that give rise to all the mammals lived more than two hundred years ago.

VII. **Magnification equation:** The magnification is the measurement of diagram that how much larger it is than the real thing.

$$\text{Magnification} = \frac{\text{Size of drawing}}{\text{Size of real object}}$$

Q1. What are the characteristics of living things?

1. **Movement:** it is an action by an organism causing a change of position or place.
2. **Respiration:** The chemical reactions in cells that break down nutrient molecules and release energy for metabolism.
3. **Sensitivity:** The ability to detect or sense stimuli in the internal or external environment and to make appropriate responses.
4. **Growth:** A permanent increase in size and dry mass by an increase in cell number or cell size or both.
5. **Excretion:** Removal from organisms of the waste products of metabolism (chemical reactions in cells including respiration), toxic materials and substances in excess of requirements.
6. **Nutrition:** Taking in of materials for energy, growth and development. Plants require light, carbon dioxide, water and ions. Animals need organic compounds and ions and usually need water.
7. **Reproduction:** The process that make more of the same kind of organism.