

UNIT 1 LIVING THINGS .

1. CHARACTERISTICS OF LIVING THINGS.

All living things share these characteristics:

- a) **Nutrition:** Living things need food to obtain energy.
- b) **Respiration:** Living things exchange gases with the environment (oxygen and carbon dioxide).
- c) **Reproduction:** Living things produce young.
- d) **Excretion:** Living things produce waste that must be expelled out.
- e) **Growth:** Living things use energy from food to grow (get bigger and change).
- f) **Movement:** Living things can move (plants move slowly).
- g) **Interaction:** Living things interact with the world around them.

2. THE LIFE PROCESSES OF LIVING THINGS.

All living things perform these life processes in different ways:

- **NUTRITION:** All living things take nutrients and transform into energy, but there are differences about how they feed:

- * Plants make their own food(they are producers) through a process called *photosynthesis*.
- * Animals feed on other living things (they are consumers).
- * Some living things, like fungi or bacteria) feed on the remains of dead living things (they are decomposers)

- **INTERACTION:** All living things interact with their environment. A change is called *stimulus* and the reaction is a *response*. Animals use our

sense organs to interact.

- REPRODUCTION: Thanks to this process living things create new living things similar to themselves. There are different ways of reproduction: Sexual (oviparous, viviparous) and asexual (bacteria)

3. CELLS.

All living things are made up of very small units called cells. A cell is the smallest living unit. Cells are very small, so you need a microscope to see them.

There are living things made up of only one cell, they are *unicellular*. Other organisms have many cells, they are *multicellular* living things.

There are lots of different cells in shape and size and they reproduce by dividing.

4. ORGANIZATION OF LIVING THINGS.

1. 1. A *cell* is the smallest unit.
2. 2. Cells group together to form *tissue*.
3. 3. Tissue groups together to form *organs*.
4. 4. Organs group together to form *Systems*.
5. 5. All the systems together form a *living thing or organism*.

5. CLASSIFICATION OF LIVING THINGS.

Scientists divide living things in five large groups (kingdoms).

1. A) THE MONERA KINGDOM.

These living things are unicellular. They can live in water, on land, in the air and inside other living things. Bacteria are an example of monera.

B) THE PROTIST KINGDOM.

They can be unicellular or multicellular. They live in water. Amoeba is an unicellular protist, some algae are multicellular protist.

C) THE FUNGI KINGDOM.

These living things can be unicellular or multicellular. They feed on the remains of dead living things. Examples: yeast and mushroom.

D) THE PLANT KINGDOM.

Plants are multicellular organisms. They make their own food (photosynthesis). Plants can't move around but they interact.

E) THE ANIMAL KINGDOM.

Animals are multicellular. They feed on other living things. They perform respiration and use their senses to interact.

LIVING THINGS CLASSIFICATION

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