

2. The Living World

Living organisms

- The living creatures of all kinds are known as living organisms.
- For example, all plants, animals, and microorganisms are living organisms.

Characteristics of Living Organisms

- All living organisms are made up of cells.
- All living organisms require food.
- All living organisms show growth.
- All living organisms respire.
- All living things respond to stimuli.
- All living things excrete.
- All living things reproduce.

Differences between Living things and Non Living things.

Living things	Non Living things
They are made up of cells.	They are not made up of cells.
They show movement, but the energy for movement comes from within the organism.	They show movement by taking external force or energy.
They need food.	They do not need food.
Growth is irreversible.	Growth is reversible.
Respiration occurs in which food is oxidised to release energy.	They do not need respiration.
Reproduction occurs in living things.	Non living things do not reproduce.

Differences between Plants and Animals

Plants	Animals
They can make their own food by the process of photosynthesis. They are known as autotrophs.	They cannot make their own food. They are heterotrophs.
They show movement but cannot show locomotion i.e. they cannot change their position from one place to another.	They show movement as well as locomotion.
They show a response to stimuli but lack sense organs.	They also show a response to stimuli and have well-developed sense organs.
They grow throughout their life.	They stop growing once they reach their adult form.

- **Plants and their Products**

1. Plants act as source of food.

Food items and their Nutritional Importance

Food items	Nutrient
Pulses such as gram (<i>chana</i>), black gram, green gram (<i>moong</i>) peas, pigeon pea (<i>arhar</i>) lentil (<i>masoor</i>), etc.	Proteins
Soya bean, ground nuts, sesame, castor, mustard, sunflower, etc.	Fats or lipids
Vegetables, spices, fruits	Vitamins and minerals

1. **Medicinal Plants** - Eucalyptus, neem, tulsi and ginger

- **Animals and their Products**

1. **Milk and Flesh Yielding Animals** – cattle, goat, poultry, pig, sheep, etc.

2. Draught Animals – horse, donkey, mule, etc.

3. Fibre, Hide and Skin Yielding Animals - sheep, goat, cattle, camel, etc.

- **Some Important Animals**

1. **Cattle** – Provide milk, cow dung (for gobar gas and manure) from them. Also used to plough fields.

2. **Sheep and Goat** – Provide meat, wool and hide

3. **Pig** – Provides pork and hide

4. **Poultry** – Provide meat and eggs

5. **Fishes** – Act as nutritious food

- Freshwater fishes – *Catla*, *Rohu*

- Marine fishes – *Hilsa*, *salmon*

6. **Honeybees** – Reared to obtain honey and beeswax. Queen bee lays eggs which are fertilized by drones. The worker bee looks after larvae and collects nectar from the flowers to produce honey. Rearing honey bees on a commercial scale is called apiculture.

7. **Silk Moth** – Provides silk, larvae develop into cocoon whose body is covered with silk threads. The commercial rearing of silk moths is called sericulture.

Harmful Plants and Animals

Plants	Harmful Effects
Coral tree	Leafs, bark, and seeds are poisonous that causes weakness, shortness of breath
Castor oil plant	Chewing of seeds may cause vomiting, diarrhea and other health problems
Parthenium	Causes allergic respiratory problems
Poisonous Ivy	Causes itching, rashes

Animals	Harmful Effects
Snakes, Scorpions	Contain dangerous venom that can kill even a human
Dogs, cats	Bite of an infected dog or cat can cause rabies
Mosquitoes, flies	Carry disease-causing germs

Wild Animals are those animals that live independently without human care and hunt other animals for their food.

Example- wolf, crocodile, lion etc.