

**Characteristics - living organisms.**

- are made up of cells
- need food to carry out life processes
- grow e.g. - seed into a plant.
- respire
- respond to stimuli
- excrete waste and harmful materials
- reproduce their own kind. e.g. - some animals lay eggs and some give birth to young ones.
- show movement
- take birth, grow and eventually die.

**Habitat**

- natural surroundings where an organism lives.
- it consists of both abiotic and biotic environment which are essential for the survival.

<b>Aquatic habitat (Organisms living in water)</b>	<b>Terrestrial habitat (organisms living on land)</b>
<ul style="list-style-type: none"> <li>- Marine habitat - seas &amp; oceans with saline water. e.g.- fishes, whales, etc</li> <li>- Fresh water -ponds, pools, lakes and rivers. e.g. frog.</li> <li>- Estuaries: coastal regions where a river or stream containing salty water meets fresh water.</li> </ul>	<ul style="list-style-type: none"> <li>- Desert: very hot and dry place where rainfall is very little. eg. cactus, camel.</li> <li>- Grass land: hot &amp; partly dry area where grass are main plants. Receives moderate rainfall.</li> <li>- Rainforest: warm &amp; moist and receives plenty of rainfall</li> <li>- Polar Regions: Cold and dry place always covered with snow. Scanty vegetation</li> <li>- Mountain: Rocky and much higher than the land surrounding them.</li> <li>- Coastal Region: region where land meets the sea.</li> </ul>

**Adaptation**

- special features or certain habits or behaviours, which enable a plant or an animal to live in its surroundings.

**Adaptation in Aquatic Habitats**

- **Plants:** reduced roots, waxy coat on leaves, stems are long, hollow and light, stomata on upper surfaces of leaves etc
- **Animals:** stream-lined and spindle shaped body, gills, fins, scaly and slippery fin.

**Adaptation in terrestrial habitats**
**Desert**

- **Plants:** long root, fleshy stem, leaves, modified into spines.
- **Animals:** inactive during day and stay in burrows, nocturnal, excrete concentrated Urine, etc.

**Mountains:**

- **Plants:** cone shaped having sloping branches, needle - Like leaves grow close to the ground.
- **Animals:** hibernation, migration, thick fur, long hair etc.

**Rainforest**

- **Plants:** drip tip, climbing auto the trundles of nearby trees, big leaves.
- **Animal:** camouflage

**Temperate Forests:**

- **Plants:** Deciduous trees
- **Animals:** migration, hibernation and storing food for eating during winter.

**Boreal Forests:**

- **Plants:** Flexible stem, narrow or tiny leaves, conical shaped trees.
- **Animals:** hibernation, migration, thick for etc

**Grassland:**

- **Plants:** flexible stem, narrow or tiny leaves, deep roots.
- **Animals:** Herbivores - strong teeth, long ears, eyes on the sides, long legs. Carnivores - sharp colours, camouflage eyes in the front, long and prong canines.

