

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.

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

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 onto the trunks 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 fur 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.

