

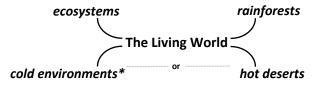
# THE LIVING WORLD

## **Cold Environments**



read

## ్లిస్ట్రీ The Big Picture



## (All) Key Terms



**Biodiversity** – The variety of life in the world or a particular habitat.



**Fragile environment** – An environment that is both easily disturbed and difficult to restore if disturbed.



**Infrastructure** – Basic equipment and structures for a location to function.



**Mineral extraction** – The removal of solid mineral resources from the earth.



**Permafrost** – Permanently frozen ground.



**Polar** – Most extreme cold environment inc. Antarctica and much of Greenland.

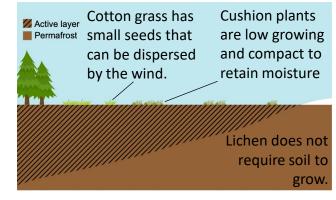


**Tundra** – The flat, treeless Arctic regions where the ground is permanently frozen.



**Wilderness area** – A natural environment that has not been significantly modified by human activity.

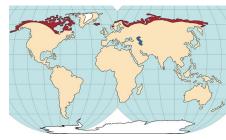
### Adaptations



#### **Arctic Foxes and Arctic Hares**

- have thick fur on their bodies and feet to keep them warm
- in winter their fur becomes white providing camouflage from predators

## **Q** Location



Polar – Antarctica and much of Greenland. Tundra – Includes parts of Canada, Alaska, Northern Europe and Russia.

### **!!!**) Characteristics

Climate – P = Temp below freezing all year and precipitation low. T = High temp range. Snowy winter, rain in summer. Dark winter.

Permafrost – T = active layer freezes in winter and thaws in summer. Permafrost below.

**Soil** – P = mainly bare rock. T = Thin and lack fertility. Waterlogged in summer. Depth and fertility increase from Poles.

**Biotic** – Low level of biodiversity. Food chain and webs are very basic. Adaptations required.

People – No permanent settlements in polar. Indigenous people live in tundra esp. near coast.

### 🔀 Interdependence

Interdependence includes:

- simple food webs
- sustainable coexistence of people, plants and animals in cold environments
- adaptations of plants and animals to soil and climate characteristics
- potential damage to the ecosystem inflicted by resource exploitation.

### **3** Biodiversity

summers

Thousands of species of lichens, plants and insects.

Climate change threat biodiversity

Species dependent on short, mild

 Considerable biodiversity

Exploitation threat by humans