Aquatic

Producing oxygen and being affected by the changes of temperature, salinity and acidity.

Grassland

A key factor in food chains and an important part in carbon stock. Can be affected by land-use change, vegetation degradation and changes of environmental factors.

Desert

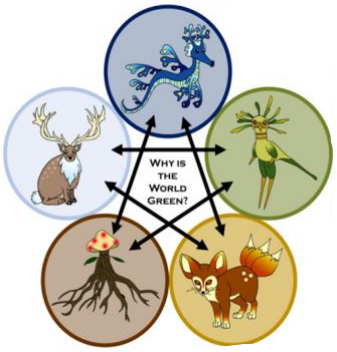
Less biodiversity and influence neighbouring ecosystems by dust and sandstorm. The key factor to a desert is rainfall.

Tundra

Including arctic, alpine and the Antarctic. It is the coldest of all biomes with low precipitation, long and cold winters. Can be affected by global warming.

Forest

Holding incredible biodiversity, maintaining ecological balance, absorbing carbon dioxide and releasing oxygen. A forest can be affected by human activities, changes of environmental factors and fire.



Biosphere

All the living things on Earth and their living environment.

Composition: plants, animals, fungi, bacteria, and viruses.

Interactions: atmosphere, cryosphere, geosphere, hydrosphere.

Challenges: symbiosis, parasitism, predation, competition, and global changes.

Atmosphere

All gases around Earth, solid and liquid particles in clouds.

Composition: Nitrogen, oxygen, carbon dioxide, water vapour, a few inert gases, small amounts of ammonia, organic matter, ozone, various salts and solid suspended particles.

Interactions: biosphere, cryosphere, hydrosphere.

Challenges: dynamicity, global changes, plant coverage.

Cryosphere

All water in a solid form on Earth.

Composition: Snow, glaciers, sea ice, icebergs, ice sheets and frozen ground.

Interactions: biosphere, atmosphere, hydrosphere.

Challenges: dynamicity, movement and global changes.

Geosphere

All rocks, minerals and topography on the surface of Earth.

Compositions: rocks and minerals.

Interactions: biosphere, hydrosphere.

Challenges: natural hazard, erosion and crustal movements.

Hydrosphere

All the water covering the Earth surface.

Composition: oceans, lakes, rivers and small bodies of water.

Interactions: biosphere, atmosphere, cryosphere.

Challenges: dynamicity, global changes, natural hazard.