

### Introduction to Ecology

#### Ecology:

- The study of how \_\_\_\_\_ interact with each other as well as their \_\_\_\_\_

#### Ecosystems:

- System in which \_\_\_\_\_ (biotic) interact with each other and \_\_\_\_\_ (abiotic)
- Biotic factors – \_\_\_\_\_
- Abiotic factors – \_\_\_\_\_
- The more biotic factors an ecosystem has, the more \_\_\_\_\_ it is
- High levels of \_\_\_\_\_ are associated with a healthy, \_\_\_\_\_ ecosystem

#### The Levels of Organization

#### The Biosphere

- The \_\_\_\_\_ is the part of the planet where life exists
- including:
  - Water (\_\_\_\_\_)
  - Air (\_\_\_\_\_)
  - Land (\_\_\_\_\_)

#### Atmosphere:

- Layer of \_\_\_\_\_ that surround the Earth
- Examples of gases are: \_\_\_\_\_

#### Lithosphere:

- Earth's \_\_\_\_\_ outer layer
- Extends \_\_\_\_\_ down from the surface
- Includes \_\_\_\_\_ which is home to many organisms, plants, and animals

#### Hydrosphere:

- All the \_\_\_\_\_ on the Earth
- About \_\_\_\_\_ of water is salt water
- All living things need \_\_\_\_\_

## Biomes

- Biospheres are made up of \_\_\_\_\_
- Biomes:
  - A large geographical region that contains similar \_\_\_\_\_
- Generally characterized by types of \_\_\_\_\_ and \_\_\_\_\_ living there and also average \_\_\_\_\_ and \_\_\_\_\_
- There are two main groups of biomes – \_\_\_\_\_ and \_\_\_\_\_
- In Canada, there are five major terrestrial biomes:  
\_\_\_\_\_
- There are also two main types of aquatic biomes:  
\_\_\_\_\_

## Ecosystems

- Biomes are made up of smaller \_\_\_\_\_
- Some biomes are more biodiverse than others
- If a biome has a lot of biodiversity, it has many \_\_\_\_\_ made up of \_\_\_\_\_ of different \_\_\_\_\_

## Community

- Made up of \_\_\_\_\_ of different \_\_\_\_\_ that live and interact in an \_\_\_\_\_
- i.e. \_\_\_\_\_

## Population

- A group of members of the \_\_\_\_\_ that live in the \_\_\_\_\_

## Species

- A group of \_\_\_\_\_ organisms in an ecosystem
- Members can \_\_\_\_\_ with each other

## Habitat

- The physical \_\_\_\_\_ of an organism – where they live

## Niche

- The \_\_\_\_\_ or way of life of a species within its environment
- The \_\_\_\_\_ of the organism

## Example

All grey squirrels are part of the same species but they are not all part of the same population. They may have different habitats which means one population might live in a forest while another population might live in a field.