

# Warm Up (2/25-2/26)

You have two minutes to:

**Discuss and list** (use paper and pencil on desk) as many things that involve this category:

**Places you can visit to enjoy the environment**

# Warm Up (2/25-2/26)

You have two minutes to:

**Discuss and list** (use paper and pencil on desk) as many things that involve this category:

**Movies that have an environmental theme or message**

# Warm Up (2/25-2/26)

You have two minutes to:

**Discuss and list** (use paper and pencil on desk) as many things that involve this category:

**Environmental issues facing the world today**

# Warm Up (2/25-2/26)

You have two minutes to:

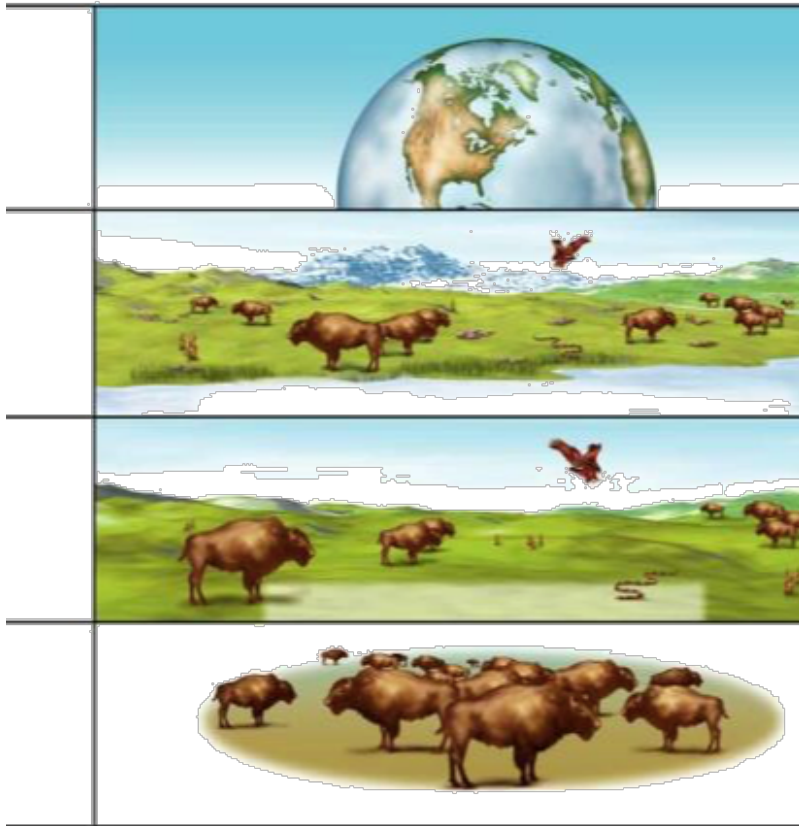
**Discuss and list** (use paper and pencil on desk) as many things that involve this category:

**Ways an individual can help with the environment**

# Why is Biodiversity Important?

- [https://youtu.be/GK\\_vRtHJZu4](https://youtu.be/GK_vRtHJZu4)

# 2.1 Notes: Organisms and Their Environment



# Agenda

- Ecology lists
- 2.1 Notes: Organisms and Their Environment
- Ecosystem research & drawing

**Homework: Finish drawings (Due Wed/Thurs)**

**\*\*Gala donations are now being accepted\*\***

**\*\*Be expecting a quick quiz towards the end of the week\*\***





# Ecology

The study of interactions that take place between organisms and their environment



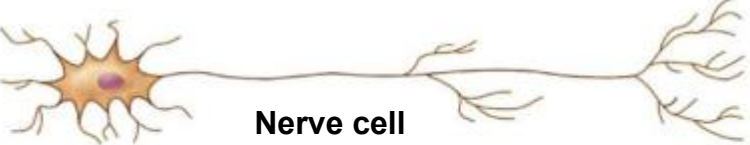





# Levels of Organization

Biosphere	The part of Earth that contains all ecosystems	 <p><b>Biosphere</b></p>
Ecosystem	Community and its nonliving surroundings	 <p><b>Hawk, snake, bison, prairie dog, grass, stream, rocks, air</b></p>
Community	Populations that live together in a defined area	 <p><b>Hawk, snake, bison, prairie dog, grass</b></p>
Population	Group of organisms of one type that live in the same area	 <p><b>Bison herd</b></p>

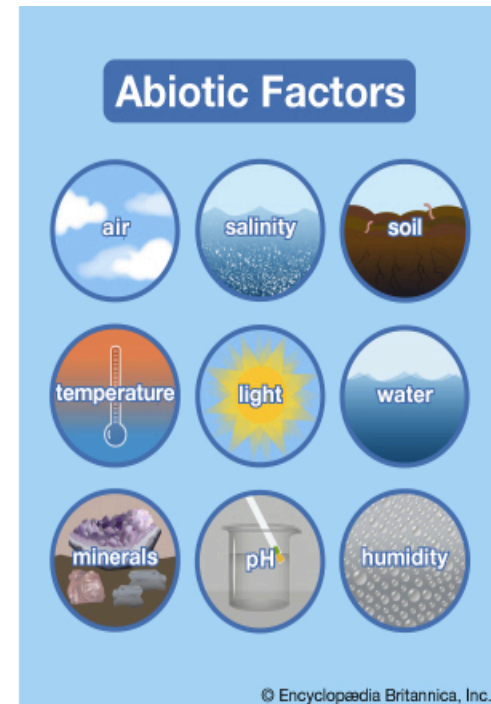
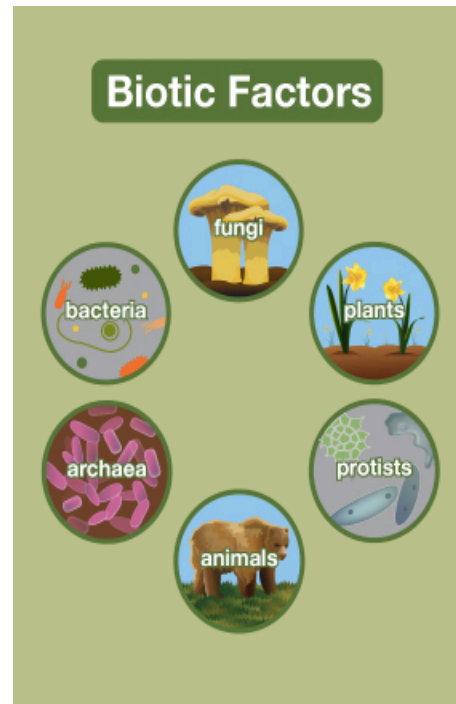
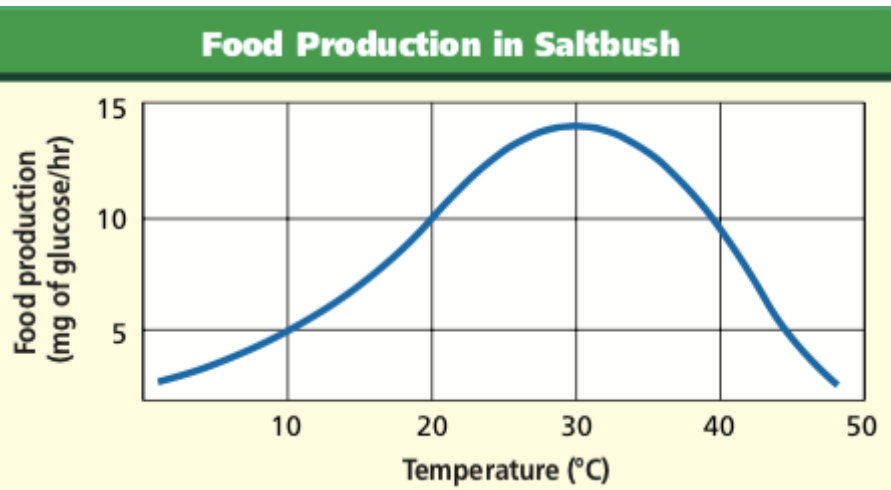
# Levels of Organization

Organism	Individual living thing	 <b>Bison</b>
Groups of Cells	Tissues, organs, and organ systems	 <b>Nervous tissue      Brain      Nervous system</b>
Cells	Smallest functional unit of life	 <b>Nerve cell</b>
Molecules	Groups of atoms; smallest unit of most chemical compounds	 <b>Water      DNA</b>

# Abiotic vs. Biotic Factors

- **Abiotic factors** are nonliving parts of an organism's environment
  - Ex: temperature, moisture, light, soil

- **Biotic factors** are living organisms that inhabit an environment

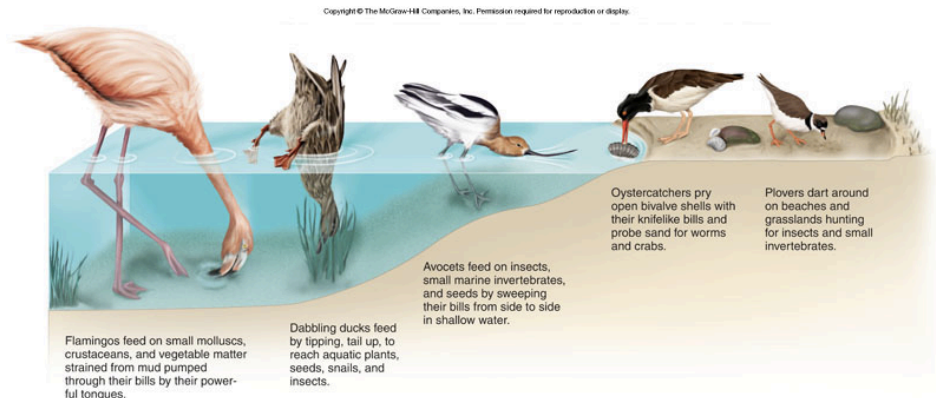


# Habitat vs. Niche

- A **Habitat** is a place where an organism lives out its life.



- A **Niche** is all strategies and adaptations a species uses in its environment
  - how it meets specific needs for food and shelter, how and where it survives, and where it reproduces



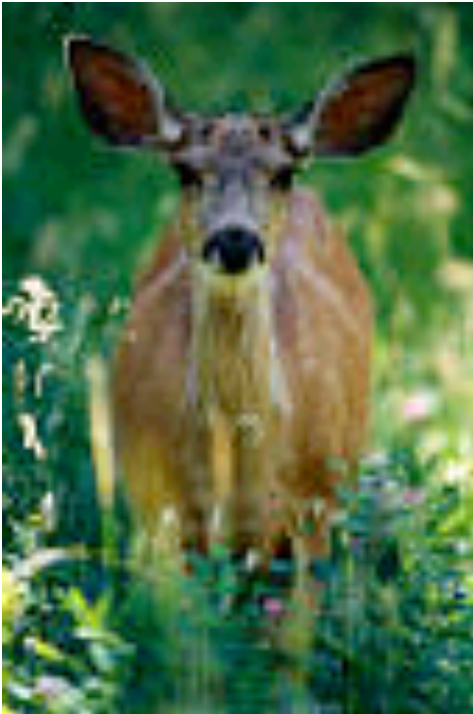
# Comprehension Check

1. Give two examples of **abiotic factors**.
2. Give two examples of **biotic factors**.
3. What is the difference between an **ecosystem** and a **community**?
4. Give an example of an organism and describe its **habitat**.

Youngest (1)- Oldest (4)

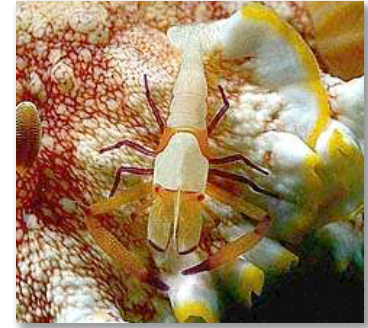
# Types of biotic relationships

1. Feeding - one organism eats another
  - a. predator - organism that hunts another organism
  - b. prey - organism that is hunted
  - c. ex: lions feeding on a water buffalo



2. **Symbiosis** - close relationship between two or more organisms; at least one organism benefits:

a. **Commensalism**- one organism benefits, the other is neither helped nor harmed.



b. **Mutualism**- both organisms benefit from living together.



c. **Parasitism** - one organism depends/ lives in or on another organism, the other organism is harmed.



# Comprehension Check

<https://youtu.be/zSmL2F1t81Q>