

Put these terms in order from the smallest to the largest.

Atom

Biomes Biosphere

Cell

Community

Ecosystem

Element

Compound/molecule

Organ System

Organ

Organism

Organelles

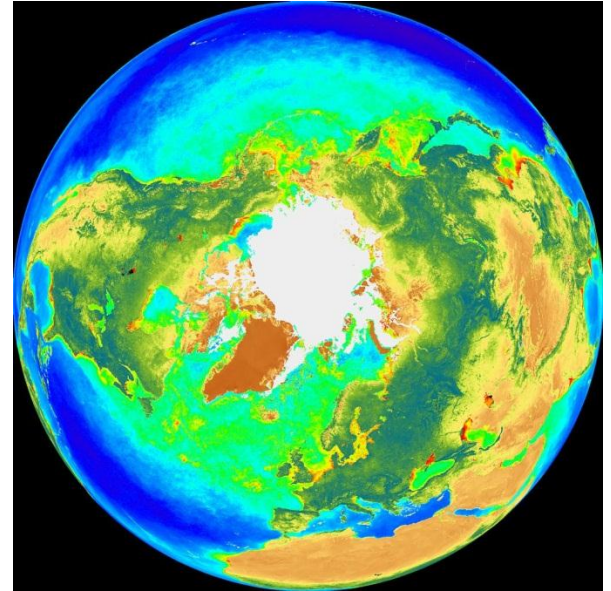
Population

Tissue

Levels of Organization

- **Biosphere**
- **Biomes**
- **Ecosystem**
- **Community**
- **Population**
- **Organism**
- **Organ System**
- **Organ**
- **Tissue**
- **Cell**
- **Organelles**
- **Compound/Molecule**
- **Element**
- **Atom**

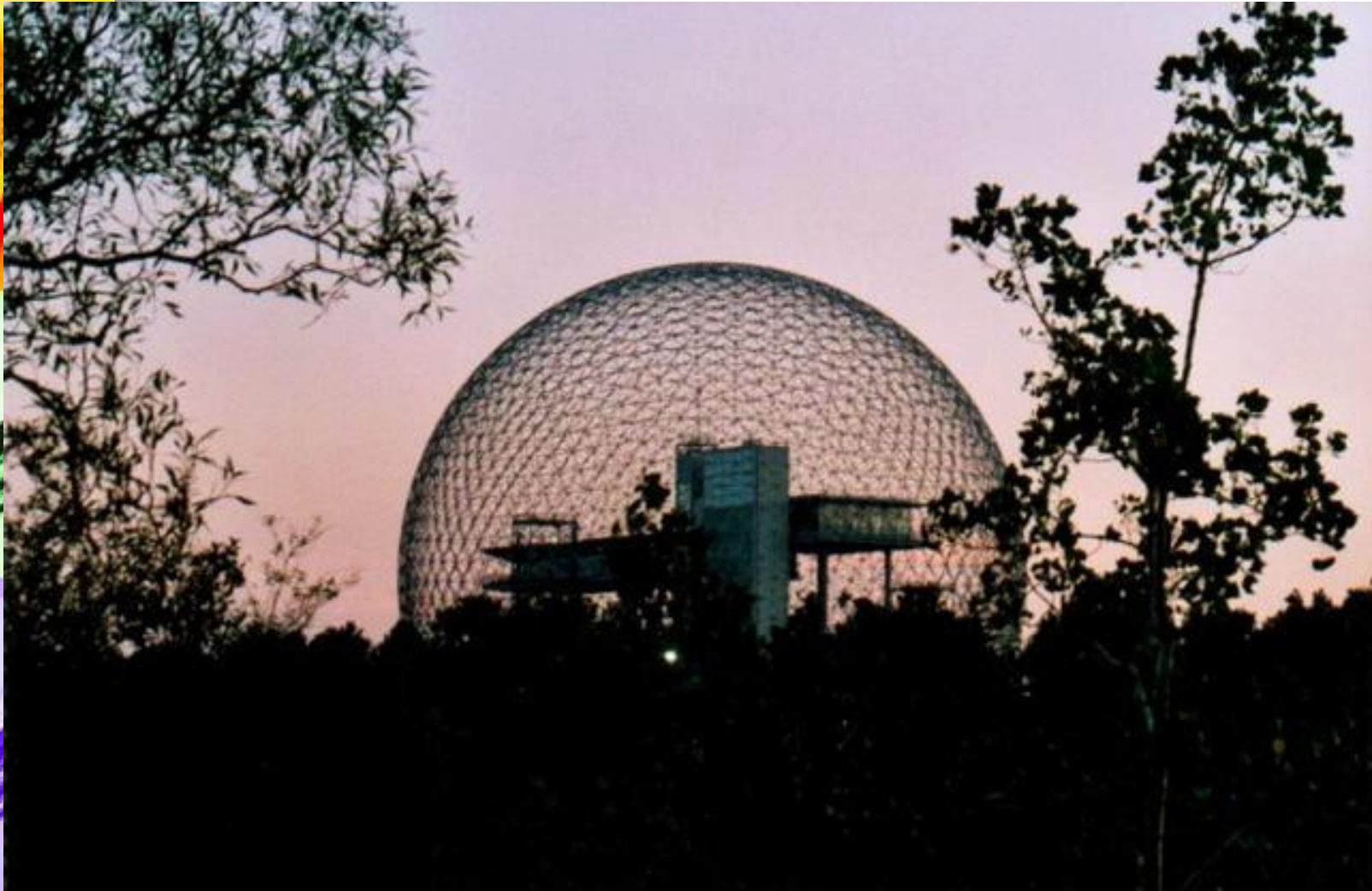
The Biosphere



- Part of the earth in which life exists.
- Its range = 8 km. above surface to 8 km. below surface of ocean.
- **All living AND non-living things**
- Divided into - Biomes.

Biomes or Ecospheres

- Specialized regions of the biosphere



Ecosystems

- All **biotic** (living) and **abiotic** (nonliving) factors that **INTERACT**.
- Biotic factors: Living
- Abiotic factors: soil, water, temperature, elevation, and location on the earth.
- Examples of ecosystems: forest, pond, lake, grassland, and mountain.



Community

- Groups of many **different** species of organisms interacting in a particular area
- **Only biotic** factors that interact between different species of organisms
- Give me some examples

A vertical strip of four images on the left side of the slide. From top to bottom: a blue clock face on a blue background, a red clock face on a red background, a green open book on a green background, and a blue open book on a blue background.

Population

- Group of organisms of **ONE** species that **interbreed** and live in the **same place** at the **same time**.
- Give me some examples

Individual Organism

- Individual living thing
 - You and I are considered individual organisms.
- Can you give me some more examples?





Organ Systems

- Groups of organs that work together to perform a specific function
 - Examples
 - Nervous System
 - Circulatory System
 - Respiratory System
 - Etc....



Organs

- Group of tissues that work together to perform closely related functions

- Examples

- Heart
- Brain
- Lungs
- Etc...

Tissues

- Groups of similar cells that perform a particular function
 - Examples
 - Cardiac Tissue
 - Skeletal Tissue
 - Etc...



Cells

- The smallest functional unit of life.
- Two kinds of cells
 - Prokaryote
 - Bacteria
 - Eukaryote
 - Animal
 - Plant



Organelles

- Small “organs” in the cell
 - Mitochondria
 - Endoplasmic Reticulum
 - Nucleus



Compounds/Molecules

- Cells are composed of many chemical compounds-Two or more elements interacting





Elements





- Molecules are made up of element interacting with one another
- Elements are what are found on the periodic table
- The elements C, O, N, and H make up 96% of all living things

Finally the Atom

- The SMALLEST particle of an element that has the characteristics of that element

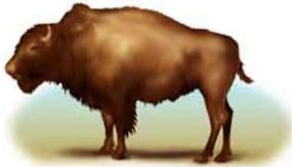

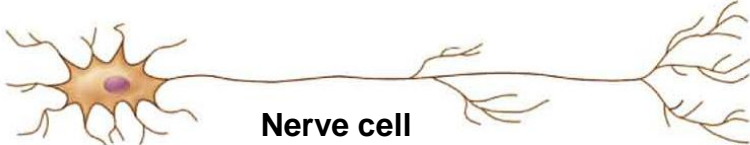



Levels of Organization

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

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Levels of Organization (*cont.*)

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

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