

## CHARACTERISTICS AND NEEDS

# WHAT IS LIFE?

What characteristics do all living things share?

- living things = ORGANISMS
- share 6 characteristics

### 1. Cellular Organization

- made of cells (small, microscopic)
- single celled (unicellular)  
or multicelled (multicellular)
- Cells → tissues → organs → systems

### 2. Chemicals of Life

- made of similar chemicals
- ex. H<sub>2</sub>O, carbohydrates, protein,  
lipids (fats), nucleic acids (DNA)

### 3. Energy Use

- use energy to grow, live, repair, etc.

### 4. Response to Surroundings

- "move"
- stimulus → response

### 5. Growth and Development

- grow larger or changing (life cycles)

### 6. Reproduction

- more cells or more "selves"

## CHARACTERISTICS AND NEEDS

What do living things need to survive?

- all living things must satisfy basic needs to stay alive

**Need Food**

(autotrophic or heterotrophic)

**Need Water**

**Need Living Space**

(habitat)

**Need Stable Internal Conditions**

(homeostasis)

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