

CHARACTERISTICS and NEEDS of living things

WHAT IS LIFE?

What characteristics do all living things share?

- living things = ORGANISMS
- share 6 characteristics

1. Cellular Organization

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

2. Chemicals of Life

- made of similar chemicals
- ex. H₂O, 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 of living things

What do living things need to survive?

- 4 basic needs to stay alive

1) Food (autotrophic or heterotrophic)

2) Water (H₂O)

3) Living Space (habitat)

4) Stable Internal Conditions (homeostasis)