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| Characteristics | Description | Example |
| 1) Made of Cells | All organisms are made from at least one cell | Paramecium, Streptococcus bacteria, human skin cells, cells in a plant’s leaf |
| 2) Displays Organization | The cell/body of an organism has an orderly arrangement | Paramecium has organelles arranged inside, Cells arrange into tissue (muscle), Tissues arrange into organs (heart), Organs arrange into Organ systems (Cardiovascular system) Anteater’s snout and long tongue |
| 3) Grows and Develops | Growth – increase in massDevelopment – different abilities | Bacterial Cell gets larger, Robins learn to fly, Bullfrog tadpole turns into frog, caterpillar to butterfly |
| 4) Reproduces | Produce offspring that passes traits to the next generation | Koalas make babies, Dogs make puppies, Cats make kittens |
| 5) Respond to Stimuli | React to changes in environment | Cheetah chases gazelle, gazelle runs awayShark smells blood, attack organismPlant in sunny window, grows toward window |
| 6) Requires Energy | Energy is required by all life – metabolism is the chemical reactions that use energy | Squirrel eats nuts, Plants use sun’s energy, Fungi eat dead stuff |
| 7) Maintains Homeostasis | Keeps stable internal environment | Humans sweat, change number of red blood cells |
| 8) Adapts to Environment | Inherit changes over time that are passed to offspring | Orchids have specialized roots, Drip tips in rain forest plants |

# Characteristics of Life

Cell: the basic unit of life

Unicellular: made of one cell

Multicellular: made of many cells