**Chapter 2: Living Things**

**Section 1: What is Life?**

|  |  |
| --- | --- |
| Main Ideas1. All living things share cellular organization, contain similar chemicals, use energy, respond to their surroundings, grow and develop, and reproduce. |    |
| 2. Living things come from other living things through reproduction. |   |
| 3. Living things need water, food, living space, and stable internal conditions to survive. |  |
| Key Terms |  |
| Organism:Living things.Organisms are living things. |   |
| **Cell**The basic unit of structure and function in an organism. They are so small that you need a microscope to see them. |    |
| **Unicellular**Single-celled organisms that include bacteria, the most numerous organisms on Earth. They are made of only one cell. Wow! |   |
| MulticellularAn organism that is composed of many cells that are specialized to do certain tasks. |  |
| StimulusA change in an organisms surroundings that causes the organism to react, it can include change in temperature, light, sound, and other factors. |   |
| ResponseAn action or change in behavior. |   |
| Development |  The process of change that occurs  during an organism’s life to produce a more complex organism. |

|  |  |
| --- | --- |
| Chemicals of LifeWater, the most abundant chemical in the cell.Carbohydrates, the cell’s main energy source.Proteins, the building materials of the cells.Lipids, the building materials of the cells. | Water  Carbohydrates Proteins Lipids   |
| Nucleic Acids , the genetic material-the chemical instructions that direct the cell’s activities. | Nucleic Acids   |
| Spontaneous generation | The mistaken idea that living things can arise from non-living sources.  |
| Autotrophs | (auto= self and troph=feeder)Autotrophs are organisms that can make their own food using energy from the sun. |
| Heterotrophs | (hetero=other and troph=feeder)Heterotrophs are organisms that cannot make their own food.  |
| Homeostasis | Maintaining an internal balance or stable internal conditions.  |