The Characteristics of Life

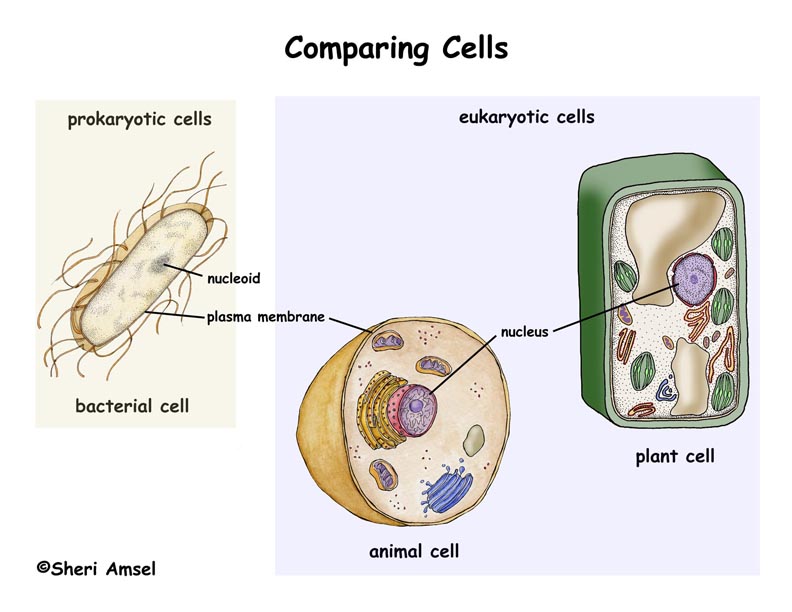
What characteristics are common to **ALL** living things?

All living things…

1. Have at Least one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * All cells have \_\_\_\_\_\_\_\_\_\_\_\_\_\_ inside as the genetic blueprint for life.
   * **Cell Types**
     1. If the DNA is **NOT** in a separate structure (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_), the cell is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
     2. If the DNA is in a nucleus, the cell is eukaryotic.

**A Prokaryotic cell (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ only) A Eukaryotic cell (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**

Label the parts of the 2 cells below.



* **Cell Number**
  1. An organism that has only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **cell** is said to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
     + Examples = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(yeast)
  2. An organism that has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ **cell** is said to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
     + Examples = all \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, all \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and some \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – get larger
     + In cell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
     + In cell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ =
     + Into a mature organism that can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
     + Reach the end of its lifespan
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Have the ability to create \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ like themselves
   * **Types of reproduction**
     1. If \_\_\_\_\_\_\_ organism creates an exact copy (clone) of itself to become 2 organisms, it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reproduction
     2. If \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ unite to create a genetically different individual, it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reproduction
        + Creates new \_\_\_\_\_\_\_\_\_\_\_\_ combinations in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Obtain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which is used to produce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. **Ways Organisms Obtain Food = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it or \_\_\_\_\_\_\_\_\_\_\_\_\_\_ it**
      1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = make food in their cells
         * Called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
         * Usually involves the process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
         * Examples = \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and some \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = must \_\_\_\_\_\_ other organisms to get food (glucose) to their cells.
         * Called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
         * Examples = all \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, some \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, some \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. **Produce Energy** during the process of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ process performed by the cells of \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to change \_\_\_\_\_\_\_\_\_\_\_\_ energy into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that the cell can use to do \_\_\_\_\_\_\_\_\_\_\_ and carry out \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ processes.
   * **Types of respiration**
     1. Respiration that uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ respiration.
     2. Respiration that does \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ respiration
   * \*\*\*After obtaining food and producing/using energy, all living things produce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.\*\*\*
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to changes in the environment
   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to stay alive = maintaining \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = balance
   * Examples = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to produce heat, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to cool off, plants \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ toward windows to get sunlight
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to changes in the environment
   * Involves \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ change that occurs over generations to help a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ survive. (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)
   * Examples = a new \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ creates a new \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that is better camouflaged (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) in environment.