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.