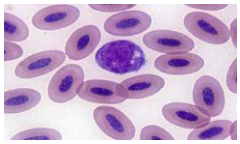
Characteristics of Life - Notes guide Name: _____

Brainstorm: What makes something alive? _____

To be considered "living," something must possess ALL characteristics, not just some.

- If something has all of these traits, we call it an "_____."
- To what other English words is the word "organism" related? _____

Characteristic #1: Made of _____

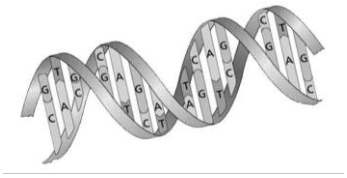


- All living things are made up of one or more _____
- Can you name a species or group that is unicellular? _____
- Can you name the major kingdoms that are all multicellular? _____

Characteristic #2: _____

- All living things must be able to _____.
- Can you name a species or group that reproduces asexually? _____
- Can you name a species or group that reproduces sexually? _____
- Why is reproduction a requirement for life? _____

Characteristic #3: _____



- All living things must possess a _____ _____ to pass down to each generation.
- Can you name the universal genetic code? _____
- Why is it important for DNA to be a universal language? _____

Characteristic #4: _____ & _____

- All living things must grow and develop over time.
- How do living things grow? _____
- Give an example of development. _____
- What specific changes take place during this development? _____

Characteristic #5: _____

- All the chemical reactions in an organism is _____.
- What do you think of when you hear the word metabolism? _____
- Why is metabolism so important to us? _____

Characteristic #6: _____

- A _____ is anything that elicits a response.
- Why would organisms need to respond to stimuli? _____
- Give an example of an organism responding to stimuli. _____

Characteristic #7: _____

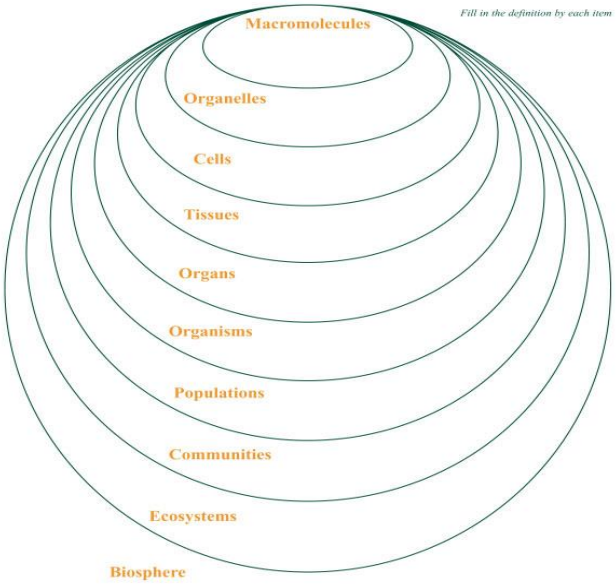
- Homeo- (or homo-) means "_____"
- Stasis means "_____," "_____"
- Organisms try to maintain a _____ internal environment.
- Explain how you maintain homeostasis. _____
- Explain how a different organism maintains homeostasis. _____

Characteristic #8: _____

- Living things must _____ and _____ to their changing environments.
- What evidence has been presented that illustrates evolution? _____
- Give an example of an organism's adaptations. _____

<u>Organization of Life</u>

- Biosphere: _____ around the Earth that sustains life
- Ecosystem: within the biosphere are different areas with different _____
- Community: group of all _____ things in an area
- Population: group of a _____ _____ in an area
- Organism: _____ living thing



Define the following terms:

Cells: _____

Tissues: _____

Organelles: _____

Macromolecules: _____