**Characteristics of Life Activity** Honors Biology 2014

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**Introduction:**

 Today we will explore the characteristics that define life. You will investigate an organism in your lab groups, and then conduct further research to determine how this organism *specifically* exhibits the characteristics of life.

**Steps:**

1. Observe the organism at your lab table. Please do not harm the organism in any way. Include sketch and notes about the behavior and appearance of the organism. Take notes about the organism here.
2. Using online or hard copy resources in the classroom to identify your organism. If your organism is not possible to identify to species (as it may be the case with many insects, fungi, bacteria, etc.), identify the organism to the most specific level possible. Make sure you record your sources at the end of this document.

Common Name (EX: flowering dogwood)

Kingdom

 Phylum

 Class

 Order

 Family

 Genus

 Species

4. Write the scientific name of the organism here if possible (Genus and species, Genus is capitalized, species is lowercase, everything is italicized. EX: *Homo sapiens*). If you can only identify the species genus you can include the genus and sp. For species. EX: *Paramecium sp.* If you are writing the name and not typing the name you underline the entire scientific name to indicate italics (EX: Homo sapiens)

1. Investigate how your organism exhibits the following characteristics of life. Be as specific as possible. You can be creative. You may divide up the work among group members! For instance, for reproduction investigate how your specific organism reproduces. For most kingdoms you will need to research a more general group than species. For example: you may research the phylum for protists, or the kingdom for bacteria. For the animals you may be able to find species specific information.
2. Living things are made up of cells
3. Living things contain heritable genetic material (DNA/RNA)
4. Living things reproduce
5. Living things evolve (change as a group over multiple generations)
6. Living things adapt and respond to their environment
7. Living things maintain homeostasis (a stable internal state)
8. Living things are organized
9. Living things use materials and energy
10. Living things grow AND develop
11. Present what you found out about your organism to the class.
12. Record your source(s) here or in your presentation:

(Include Author, date, title (of article or source), source, and website address if available.

EX:

Worley, A. August 2014. Classification of Organisms. AHS Science.

 www.albemarlescience/classoforganisms.com

1. Submit your presentation via google docs to your teacher at

aworley@k12albemarle.org

1. Present one copy of **this document** to your teacher (hard-copy)