**Extension: Abiogenesis**

**Biology 11 Name:**

**Directions:** Research the following and create your own answer using your own language and level of understanding.

**What is abiogenesis?**

**Directions:** Watch the TedEd Video called “[The Mysterious Origins of Life on Earth](https://www.youtube.com/watch?v=de1hiS_XjWg&t=40s)” found on the classroom website or above and answer the questions that follow.

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| **Describe what Earth was like at the time life formed:** | **What are the 3 necessities required for the origin of life:** |
| **Was the first life form autotrophic or heterotrophic? How do we know this?** | |
| **Why do we believe abiogenesis used the energy from chemical gradients (hydrothermal vents) rather than sunlight to create life? (Note: there are 2 reasons for this)** | |
| **What is LUCA?** | **What proof is there that LUCA existed?** |

**Directions:** Research the following and create your own answer using your own language and level of understanding.

**Abiogenesis is one theory of how life originated on Earth, one other theory is called panspermia. Explain how this theory believes life originated.**