**AP Biology Pre-Discussion Questions: Intro- Course Introduction**

**Instructions:**

* Open the presentation.
* Interact with it.
* Answer the “Questions to answer”.
* Make sure you understand the “Things you should make sure you understand”.
* View the “Supplementary Resources”.
* Write down any questions that you have about the material.

**Topic Presentation:**

[**click here**](http://prezi.com/6gn_5zw5k6yn/ap-bio-introductory-presentation/)

**Textbook Reading:**

* Chapter 1: Themes in the Study of Life

**Supplementary Resources:**

**Videos By Paul Anderson:**

* “[Essential Characteristics of Life](http://www.youtube.com/watch?v=bILvTe2_FEE&feature=plcp)”

**Questions to answer:**

1. What is unique to science as a way of understanding the Universe?
2. Compare reductionism with systems-thinking.
3. Explain the concept of emergence.
4. Explain the concept of feedback.
5. Explain the necessity and limitations of using models to understand things.
6. Why/how does life demonstrate the following properties:
   1. evolution
   2. high degree of order
   3. energy processing
   4. reproduction & development
   5. cellular organization
   6. information storage & expression

**Things you should make sure you understand:**

* How science works as a process.
* How science differs from other modes of human thought.
* What is unique about living systems, and how living systems exist within the constraints of the physical Universe.
* How and why life is organized across the domains of time and space over which it occurs.