**AP Biology Pre-Discussion Questions: Interactions 1- Organism Organization**

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[Topic Presentation:](#_t842e6igtkzf)

[Textbook Reading:](#_alxqp3enizi6)

[Principles of Life:](#_fsamy4rtfz1k)

[OpenStax Biology:](#_9qneozpmqx5j)

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[Questions to answer:](#_d3j8f8qowf6c)

[Things you should make sure you understand:](#_fluczk9r1mvv)

# Instructions:

* Open the presentation.
* Interact with it. Take notes as you wish.
* Self-Quiz 1: Answer the “Questions to answer”.
* Self- Quiz 2: Make sure you understand the “Things you should make sure you understand”.
* Feel free to view the “Supplementary Resources”.
* Write down any other questions that you have about the material.

## Topic Presentation:

[**click here**](http://prezi.com/unqers6ftwgx/ap-bio-physiology-1-introduction/)

## Textbook Reading:

### Principles of Life:

* Chapter 24 (whole chapter)
* Chapter 29 (sections 29.1 - 29.2)

### OpenStax Biology:

* Chapter 24- Section 24.1
* Chapter 30- Sections 30.1- 30.4
* Chapter 33- Sections 33.1 & 33.2

## Biozone Pages:

Volume 2:

* pp. 68

## Supplementary Resources:

### Videos by Paul Andersen

“[Anatomy & Physiology](http://www.youtube.com/watch?v=y2N_b0qwvxY&list=UUEik-U3T6u6JA0XiHLbNbOw&index=11&feature=plpp_video)”

“[Organ Systems](http://www.youtube.com/watch?v=dZQMjZRv16E&list=PLFCE4D99C4124A27A&index=54&feature=plpp_video)”

“[Cooperative Interactions](http://www.youtube.com/watch?v=djtc7WUmT_c&list=PLFCE4D99C4124A27A&index=58&feature=plpp_video)”

“[Plant Structure](http://www.youtube.com/watch?v=zHp_voyo7MY&feature=plcp)”

### Crashcourse Anatomy & Physiology Videos:

The material in this video is addressed by **Videos 2 - 5** on the [CrashCourse Anatomy & Physiology Playlist](https://www.youtube.com/playlist?list=PL8dPuuaLjXtOAKed_MxxWBNaPno5h3Zs8).

# Questions to answer:

1. Explain the relationship between an organism’s anatomy and its physiology.
2. How is the physiology of a unicellular prokaryote different from a unicellular eukaryote?
3. How is the physiology of a unicellular organism different from a multicellular organism?
4. How does the complexity of an organism’s physiology depend upon the diversity of the types of cells present in that organism.
5. Why are fungi “physiologically boring”?
6. Diagram the structure of a typical plant. Label systems, and organs, and explain the main functions of each.
7. How is an animal like a donut? How is it different? Might not be a bad idea to draw a typical animal “donut” diagram and label it (but you don’t have to).

# Things you should make sure you understand:

**(feel free to ask questions about them in class)**

* How the structures of organisms and their organization allow for them to meet their physiological requirements in terms of energy and matter exchange.
* How the environment places constraints on the physiology of an organism.
* How the different lineages of life are adapted for different physiological processes.