Your Inner Fish SCI-CLASS

[**Discussion Two:**](https://saintleo.brightspace.com/d2l/le/40168/discussions/topics/123675/View)

Create another analogy for geological time.  Use it to relate the following major events in the history of life:

1. The first bird.
2. The first flying insect.
3. The first eukaryotic life.
4. The first life.
5. First flowering plants.
6. First land animals.
7. First dinosaur.
8. First human.
9. First Jellyfish.

Make sure that you are clear about how years (or millions of years) are represented in your analogy. You may not repeat an analogy that a classmate has used, so be sure to be creative! It may even be to your benefit to post early in the week. Your initial response to the discussion question should be answered by 11:59pm on Thursday night.

[**Discussion Three:**](https://saintleo.brightspace.com/d2l/le/40168/discussions/topics/123676/View)

\*Note to instructor, please select **only one** of the questions below, deleting the other two before changing the status of this content item to "Published."

1. Find at least one internet source which questions the validity of homology as evidence of evolution. Briefly summarize their argument. Find and describe a response by proponents of evolutionary theory. Evaluate the evidence supporting their positions.
2. Those that resist evolutionary theory often imply that there are no vestigial structures. Assume that they are correct. Would that be evolutions Achilles heel? Why or why not?
3. Technological advances have enabled us to directly study the genome of an increasing number of organisms with increasing detail. “Look into your crystal ball” and predict the impact that this will have on the discussion of evolution by the general public.

# Discussion Four:

In this discussion question, you will be explaining how the Central Dogma (the means by which genetic information is translated into protein structure) is evidence for evolution. In your post you should first demonstrate an understanding of the Central Dogma, then discuss its relationship to evolution. You should feel free to get creative in your description of the Central Dogma: videos, pictures, PowerPoints are all welcome!

**In your response**, you may ask for clarification of part of their model of the Central Dogma, or you may add on to their discussion of the relationship between the Central Dogma and evolution.

### [Discussion Five:](https://saintleo.brightspace.com/d2l/le/40168/discussions/topics/123678/View)

In this module we are focused on microevolution, or small changes within a species/population of organisms over a relatively short period of time. Search for some real world examples of microevolution. Provide a source/citation for your example and summarize it for your classmates. You MAY NOT repeat the same example given by a classmate, so make sure that you are reading their responses before you post and posting early in the week.

### [Discussion Six:](https://saintleo.brightspace.com/d2l/le/40168/discussions/topics/123679/View)

Search the Internet for examples of some known speciation events that resulted from geographic and then reproductive isolation. Be sure to thoroughly explain the event to your classmates, and include a citation.

Once you have made an initial post, you should respond to two of your classmates by 11:59pm on Sunday night. In your response, you may ask questions about the example that was provided by your classmate, comment on how the particular example helped you to better understand speciation, or you may respectfully disagree with the example and explain why you feel that way.

### [Biological Species Concept](https://saintleo.brightspace.com/d2l/le/40168/discussions/topics/123684/View)

Please make a case either for or against classifying Chihuahuas and Saint Bernards as separate species.

### [Discussion Seven:](https://saintleo.brightspace.com/d2l/le/40168/discussions/topics/123680/View)

If we maintain a strict biological definition of “species”, H. sapiens and H. neanderthalensis were NOT separate species as they successfully interbred. What impact might this information have on assigning a date to the origin of humans? Does this change your definition of “human”? Why or why not?

### [Discussion Eight:](https://saintleo.brightspace.com/d2l/le/40168/discussions/topics/123681/View)

Search the Internet for examples where knowledge of evolution has informed modern medicine, or other fields of biology such as anatomy, embryology, or genetics. Be sure to thoroughly explain to your classmates how evolution helped to inform this particular disease/research/field. Include a citation.

Once you have made an initial post, you should respond to two of your classmates by 11:59pm on Sunday night. In your response, you may ask questions about the example that was provided by your classmate, comment on how the particular example helped you to better understand evolution, or you may respectfully disagree with the example and explain why you feel that way.

# Relating the Scientific Method

Think back to the previous modules. Select one of the topics that was covered and describe how the scientific method was employed in the study of evolution. Be sure to include the steps of the scientific method (you may refer back to Module 1 for this) and how they were used in your particular example.