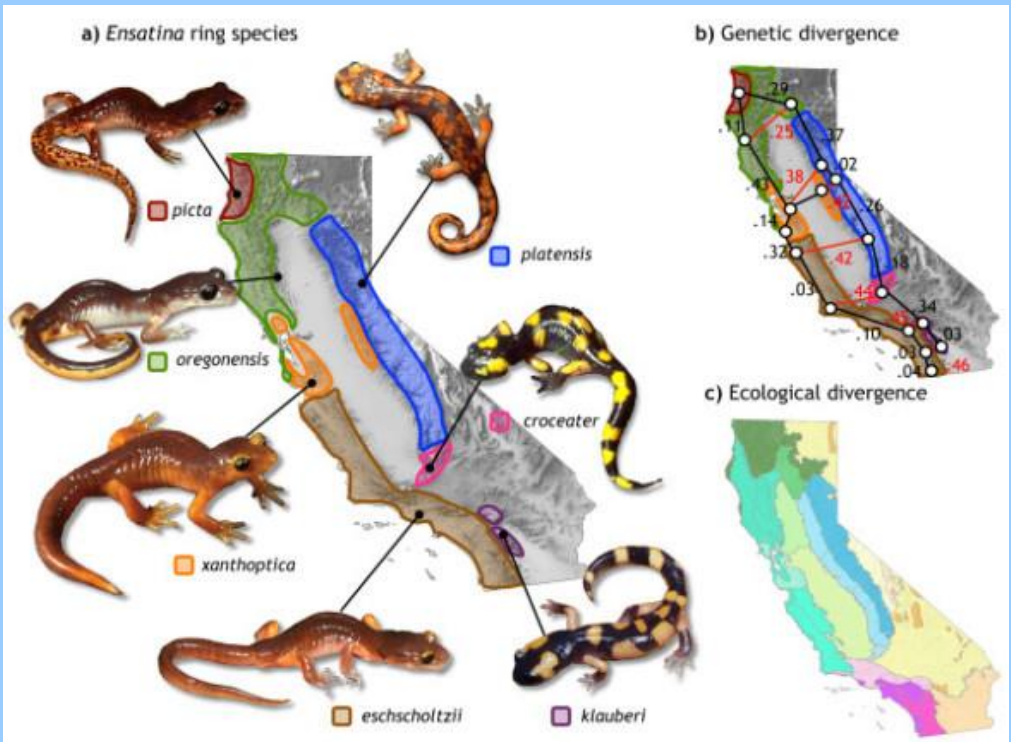
Biodiversity Showcase Projects



CHOOSING YOUR SHOWCASE BIODIVERSITY GROUP

1. Choose a group of organisms that you love. Think outside the box…something different and weird? It should be more than just one species, and less than an entire Kingdom. Somewhere in the middle of the taxonomic hierarchy. Think about choosing a group of Plants or Prokaryotes, or even Viruses.
2. Look up a few things about your group. Can you define it as an evolutionary group…a "clade" that has an evolutionary history? Can you find an evolutionary tree for your group?
3. Is there something interesting and incredible and fascinating and weird about your group?
4. Can you find some information on their genetics, on natural selection, on evolutionary processes in your group?
5. Once you're decided, post your group to the class list below…just open the document and edit it online.

FIRST CHECK—YOUR "GRABBER" AND THE EVOLUTIONARY HISTORY OF YOUR GROUP. (10 points)

1. Make a page with the incredible, fantastic, weird, interesting thing(s) about your group. This is your "grabber." Have this ready for your first check. Better be something good…there is no such thing as a boring group of organisms! In the end, life is the most fascinating thing that we know of that has happened in this universe!
2. Find out something about the evolutionary history of your group and make a page with this information. How old, on the geological time scale, are they? What is their geological/evolutionary/deep time history? What are the sub-members of the group and how are they related…what does your group's evolutionary tree look like? Have this ready for your first check.
3. Be sure you keep track of the references on the information about your "grabber" and the about the evolutionary history of your group…make a reference page or include the references in your other note pages.
4. Great Resources for starting to research your chosen taxonomic group:
   Tree of Life
   Digital Atlas of Ancient Life

SECOND CHECK—GENETICS, NATURAL SELECTION, EVOLUTIONARY PROCESSES IN YOUR GROUP (10 points)

1. Make a page with something about the genetics of your group. Find information on what particular genes, or inheritance patterns, you can find. How are those genes expressed…what are the unique genetic characteristics of the group?
2. Make a second page about how the group has evolved? What natural selection processes, or other evolutionary/genetic processes can you find out about your group?
3. Be sure you keep track of the references on the information about the genetics and the process of evolution in your group…make a reference page, or include the references in your other note pages.

THIRD CHECK—YOUR SHOWCASE PRESENTATION. MAKE IT SHINE. (30 points)

1. Your recorded showcase presentation will be multi-media with text, images/video and voice. You can organize it however you want. Be as creative as you like. Make hand-constructed pages and video them. Make slides and screen-grab them. Write a script and voice it out with full drama! These are just ideas…your creativity is the limit.
2. Your presentation should be no longer than 4 minutes…that is very short…you really have to organize it to get it that short because.
3. It must include
   a. Grabber
   b. Evolutionary History of the group
   c. Genetics/Natural Selection/Evolutionary Processes in the group

4. You will upload your recorded presentation…use whatever recording method you would like…video, voice over PowerPoint, Prezi, screen-grab video, etc. Your recording should have images/diagrams/visual information as well as voice explanations. It should be uploaded before class to our Google Classroom. Be sure that it will open and work from the link or document that is uploaded…check it twice!

There's no one right way to do this. The checks along the way are to make sure you are getting information together and not trying to "throw it all together" at the last minute. The final presentation is meant to be open and creative, but substantive. Make us love this group of organisms. Show us your love for them. Show us how well you know them. Show us the details and make them shine!