

Evolution/Taxonomy Breakout

What do you need to know?


Evolution Review –Natural Selection

- What is survival of the fittest?
- Why is inherited variation important for natural selection to occur?
- Define speciation. What are some ways speciation can occur?


What type of evidence can we use to show organisms are related? What's the strongest?

- Fossils
- Biogeography
- Homologies
- Embryology (developmental)
- Molecular –
DNA – the strongest!

THE NUMBER OF AMINO ACID DIFFERENCES
IN CYTOCHROME *c* AMONG FIVE SPECIES



	<i>E. ferus</i>	<i>D. polylepis</i>	<i>G. gallus</i>	<i>A. forsteri</i>	<i>E. africanus</i>
<i>E. ferus</i>	0	21	11	13	1
<i>D. polylepis</i>		0	18	17	20
<i>G. gallus</i>			0	3	10
<i>A. forsteri</i>				0	12
<i>E. africanus</i>					0



Do you remember?

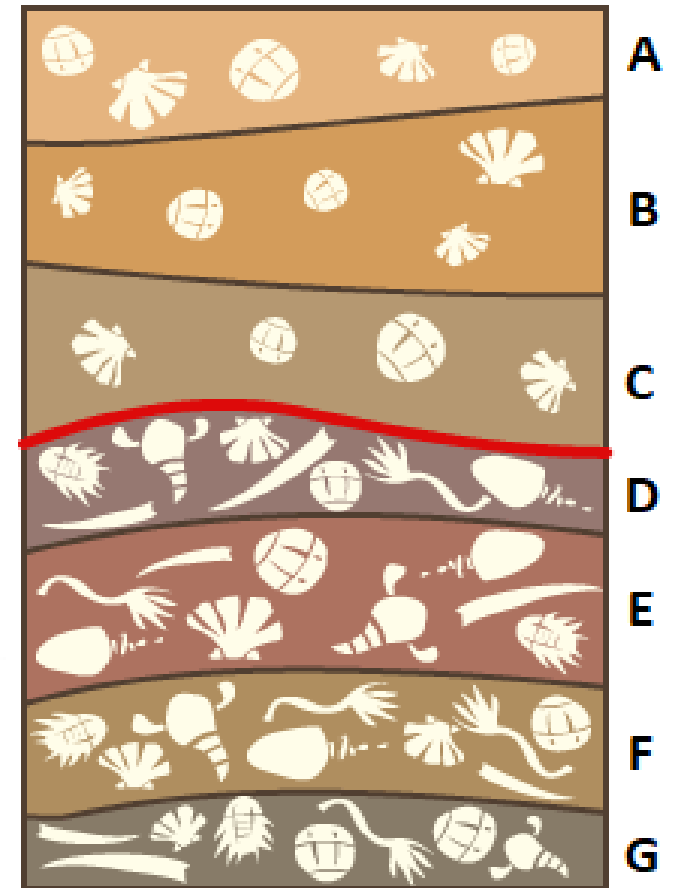
- Homologous vs analogous?
- What can fossil layers tell you?



stasis!

? →

Stratigraphic layers:



Taxonomy

- **DKPCOFGS**
- How do these relate?
- Which two are scientific name?

For the breakout -

- Do **ONE clue at a time** – **work together** so you ALL get the information
- Do NOT write on any of the clues (colored paper)
- When you finish a clue **put all the papers back in the envelope**
- Red cups mean you need help.
- When you get a lock off, put it on the parking lot – **do NOT close locks**
- You have until **FIVE minutes before class ends**. You must stop at that time and **work on your reflection and “what I need to know” sheet.**
- **GOOD LUCK!**