

AP Biology 006 – Phylogenetics

Video Review Sheet

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1. Define phylogenetics:
2. The goal of phylogenetics tree is:
3. Define speciation:
4. Define morphological:
5. Molecular: How we use _____ to figure out who is related to whom.
6. Whenever you have a tree it suggests:
7. Morphology example: Heart – tracing it through time:
 - a. In fish: there are ____ chambers – single loop
 - b. In amphibians: ____ chambered heart. They also pick up oxygen using their _____.
The pressure issue is no longer but the problem is that there is a _____ of blood. (Not a problem for amphibians but would be if you were more active/life on land)
 - c. Reptiles have a _____ to divide their three-chambered hearts.
 - d. Birds/Mammals probably both evolved the _____-chambered hearts independently.
8. Molecular data: using DNA – looking at the _____ code
9. Cladogram: uses a clade. Define clade:
10. Do develop a cladogram you use molecular/DNA evidence and synapomorphies. Define synapomorphies:
11. Goal is to create monophyletic groups – contains all the _____