IB Biology

5.4: Cladistics

Link: <http://www.ucmp.berkeley.edu/clad/clad2.html>

1. Why is cladistics considered the best method for phylogenetic analysis?
2. What are synapomorphies? Give an example.
3. What are the three assumptions in cladistics? Explain.

(a)

(b)

(c)

1. Which assumption is the most important? Why?
2. What is the difference between a cladogram and an evolutionary tree?
3. How many rules are there in constructing a good cladogram?
4. Explain the term “splitting event.” Where does it occur on a cladogram?
5. Explain the relationship between a sister taxon and a clade.
6. Why is cladistics needed in evolutionary biology?
7. What is the most important feature of cladistics?