



Biology 101

Biodiversity

A wordlist will be provided for each new topic. Use the wordlists to study. After completion of a topic and in preparation for an exam, you should be able to write a one or two sentence definition of each term and use each term in a sentence.

Study questions for this topic can be found at <http://skylinecollege.edu/case>

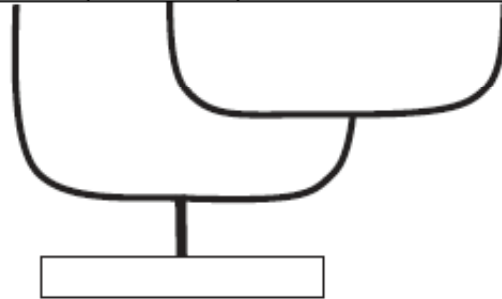
Amphibia	Fungi	Scientific name
Animalia	Genus	Species
Anthropomorphism	Kingdom	Systematics
Archaea	Linnaeus	Taxonomy
Aves	Mammalia	Teleologic
Bacteria	Mitochondria	Viruses
Biology	Order	
Clade	Phylum	Porifera (sponges)
Class	Plantae	Cnidaria (jellyfish)
Common name	Prokaryote	Platyhelminthes (flatworms)
Domain	Protists	Annelida (segmented worms)
Eukarya	Reptilia	Mollusca (e.g., clams)
Eukaryote	Ribosome	Arthropoda (e.g., insects)
Family	rRNA	Echinodermata (seastars)
Fish	Scientific method	Chordata

1. What factor defines a species? a) geographical isolation; b) reproductive isolation; c) hybridization; d) cladogenesis; e) behavior.
2. How many domains are represented in this list? Dog, human, redwood tree, Athlete's foot fungus

3. Place these words in the figure to complete a Tree of Life:
- Animalia
 - Archaea
 - Bacteria
 - Eukarya
 - Fungi
 - Plantae
 - Protist
 - Universal ancestor

Domain (and Kingdom)	Domain (and Kingdom)	Domain			
		Kingdom	Kingdom	Kingdom	Kingdom
Domain	Domain	Domain			

4. What domains are represented by the drawings below?
5. What kingdoms?
6. Given a segment of the cytochrome c gene. Which animals are more closely related? How can you tell?



Salamander



Lizard



Bird

Liz	A	T	A	C	G	A	T	C	A	T	G	C	T	C	G	T	C	C	A	T	C
Bird	A	T	C	C	A	C	T	C	A	T	C	C	T	C	G	T	C	G	A	T	T
Sal	A	C	G	C	C	G	T	C	C	A	T	C	C	T	T	T	C	A	A	T	G

7. Using the genetic information, fill in the Tree of Life for these animals:

