

CREATING A CLADOGRAM ASSIGNMENT

1) Use the following table to create a character table and cladogram.

	Vertebrae	Bony Skeleton	4 Limbs	Amniotic Egg	Feathers
Salamander	Present	Present	Present	None	None
Shark	Present	None	None	None	None
Human	Present	Present	Present	Present	None
Trout	Present	Present	None	None	None
Canary	Present	Present	Present	Present	Present

2) Use the following to create a reorganized character table and cladogram.

Derived Characters

segmented jaws hair placenta multicellular limbs

kangaroo	+	+	+	-	+	+
earthworm	+	-	-	-	+	-
amoeba	-	-	-	-	-	-
lizard	+	+	-	-	+	+
cat	+	+	+	+	+	+
sponge	-	-	-	-	+	-
salmon	+	+	-	-	+	-

3) Use the following traits and organisms to create a character table and cladogram

Derived Characters	Animals
Spinal Cord	Kangaroo
Paired Appendages	Eel
Paired Legs	Monkey
Amniotic Sac	Bullfrog
Mammary Glands	Human
Placenta	Turtle
Canine Teeth	Tune

- Based on what you have learned about Dichotomous Keys and Cladograms, decide how you could use these to identify a new species.
- In a ½ to ¾ page, describe if you feel humans will change based on natural selection. Why of Why Not?