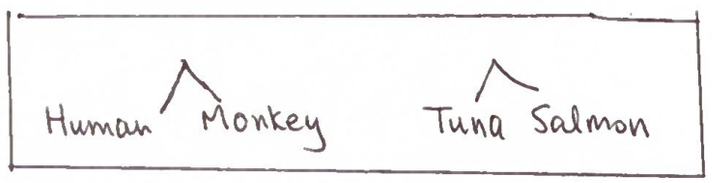
Lesson 11 Connecting things

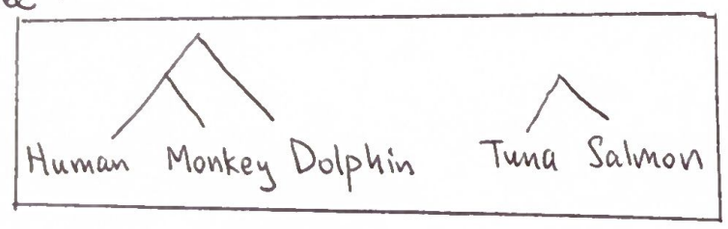
We can connect things (like animals) that share similarities by first filling in a table of traits:

	Human	Tuna	Dolphin	Salmon	Monkey
Naturally Swims		x	x	x	
Have lungs	x		x		x
Produce milk	x		x		x
Lay egg		x		x	
Have scales		x		x	
Fur / hair	x				x

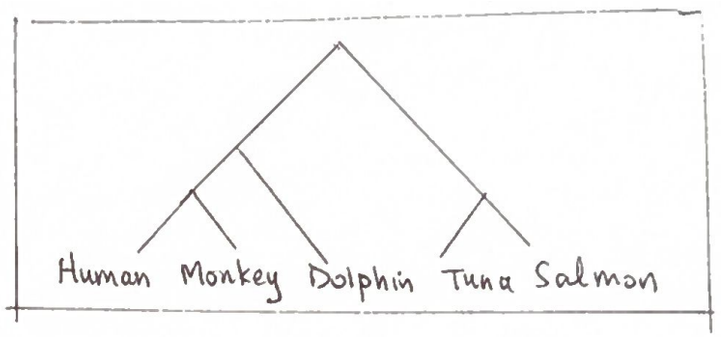
Since Human-Monkey & Tuna-Salmon are pairs with the most commonalities, we can group them via the lower branches of an evolutionary tree:



Now dolphin has some similarities with human-monkey (more so than with Tuna-Salmon) so we add them to the left tree:

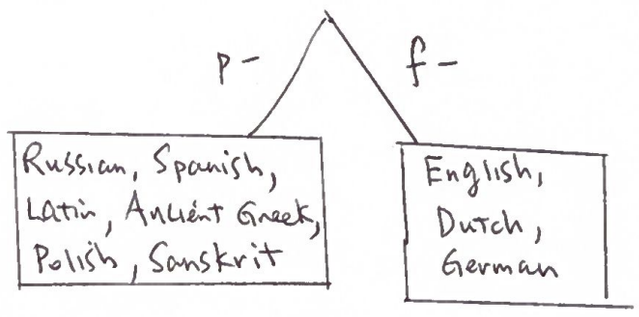


Finally if we suspect all these animals have a common ancestor, then we can connect the two separate branches together:



The same idea helps us determine how languages might be descended from some common older language.

For instance, loan words (like "ramen") mislead us into thinking English and Japanese may be related. ~~But what makes two langugs~~ Instead, what makes two languages closely related is if there is ~~more common pattern~~ a persisting pattern between many words of both languages, like the split between p- vs f- in Indo-European languages, ~~which tell us that which p~~ whose pattern persists in many words like "feet" ("pedis") and "father" ("pater" in Latin), suggesting a linguistic tree that looks like this:



In Problem 2 of this lesson, your job is to flesh out this linguistic tree further.