



Using the cladogram above, fill in the table.

	vertebrae	Bony skeleton	Four limbs	Amniotic egg	2 skull openings	hair
Shark						
Tuna						
Frog						
Human						
Hare						
Caiman						
parrot						

What do nodes 1-6 represent? derived trait common ancestor

What are the traits that are shared by the human, hare, caiman and parrot?

vertebrae bony skeleton four limbs amniotic egg 2 skull openings hair

What are the traits that are NOT shared by the human, hare, caiman and parrot?

vertebrae bony skeleton four limbs amniotic egg 2 skull openings hair

What trait is common to all of these organisms?

vertebrae bony skeleton four limbs amniotic egg 2 skull openings hair

What is the most recent common ancestor of the human and the hare?

What is the most recent common ancestor of the human and the caiman?

Would it matter if the hare and the human swapped places? yes no

Which organisms have amniotic eggs?

shark tuna frog human hare caiman parrot

In this cladogram is there an outgroup? yes no

Which organisms are more closely related? frog and the tuna the shark and the frog?

Why criteria did you use to determine this?