

NUMBER OF DIFFERENCES IN THE FIRST 60 AMINO ACIDS OF THE NEUROMODULIN PROTEIN ISOLATED FROM FIVE SPECIES

	Finch	Gecko	Turtle	Frog	Zebra fish
Finch	0	2	2	6	10
Gecko		0	1	7	11
Turtle			0	7	11
Frog				0	13
Zebra fish					0

Neuromodulin is an essential protein that is highly conserved among vertebrates. Researchers compared the first 60 amino acids of the neuromodulin protein from each of five different species. The results are shown in the table above.

Based on the data in the table, **construct** a cladogram on the template provided to represent the evolutionary relatedness of the five species. Using the data, **justify** the placement of the zebra fish on the cladogram. On the cladogram, **circle** the position of the most recent common ancestor of the two most closely related species.

