## Advanced Zookeeper

You are the zookeeper of the new zoo. This zoo is special though. Animals within the same family do not get along with each other; only unlike animals enjoy each other's company. The animals you have are from 5 different families: Ungulate, Feline, Ursidae, Canine, and Primate. Each pen has a member of each family. Your task is to organize the pens so that there is only one animal of each kind in any row or column. For example, you can't have two giraffes in the same row or column. Your final zoo enclosure should be five rows by five columns.

Your animals:
Ungulates: 5 giraffes, 5 zebras, 5 bison, 5 camels, and 5 warthogs Felines: 5 lions, 5 cheetahs, 5 lynxes, 5 pumas, and 5 jaguars Ursidae (Bears): 5 polar, 5 black, 5 brown, 5 spectacled, and 5 panda Canines: 5 foxes, 5 wolves, 5 coyotes, 5 jackals, 5 African wild dogs Primates: 5 chimpanzees, 5 gorillas, 5 orangutans, 5 monkeys, 5 lemurs

When you have solved this problem, go the Dean's Office on the $3^{\text {rd }}$ Floor of Jordan Hall to present your solution to the Master Teacher. Be prepared to justify your solution.

