## **Pedigrees**

1) Stan Smith is an American Dad who is homozygous recessive for a big chin (c). Small chins are dominant (C). Stan's Parents, wife Francine and two kids Hayley and Steve all have small chins. Draw a Pedigree for the Smith family and the chin trait.



2) The Brown family has a history of being allergic to Cats, which is a recessive trait (aa). However the Tubbs family has a history of not being allergic, which is a dominant trait (AA) Cleveland Brown and his son Cleveland Brown Jr.are both allergic to cats. Cleveland's wife Donna Tubbs, daughter Roberta, and other son Rallo are not allergic to cats. Both of Cleveland's Parents were allergic to cats and neither of Donna's parents were allergic to cats.

(assume that all kids are the biological children of Cleveland and Donna) Draw a Pedigree for the cat allergy trait in this family.



3) Dora Marquez has the explorer trait, which is recessive (e) to Non-Explorers (E). Her brother Guillermo and sister Isabella are not explorers Her parents Elena and Cole are not explorers. Cole's Brother Nico and his wife Sabrina are also not explorers. Their two daughters Alicia and Daisy are not Explorers but their son, Diego, is an explorer. Abuela, Dora' grandmother (Cole and Nico's Mother) is an Explorer but her grandfather, Gabriel Garcia Marquez, is not an explorer. Draw the pedigree for this family that follows The explorer trait.

