Name			

A family tree of sorts is called a pedigree. The symbols used for a pedigree are:

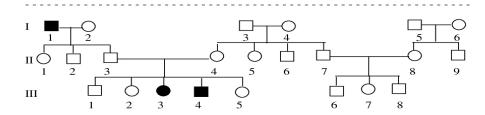
of female, unaffected

female, affected

male, unaffected

male, affected

Siblings are placed in birth order from left to right and are labeled with Arabic numerals. Each generation is labeled with a Roman numeral. Therefore, the male exhibiting the trait in the pedigree below in the bottom, center would be identified as III-4.



Try to identify the genotypes of all of the individuals above.

- 1. Is this trait dominant or recessive? Explain your answer.
- 2. Could you have known the genotype of II-3 and II-4 before they had children? What gave you the essential information to decide that they were heterozygous?
- 3. Brown eyes are a dominant eye-color allele and blue eyes are recessive. A brown-eyed woman whose father had blue eyes and whose mother had brown eyes marries a brown-eyed man whose parents are also brown-eyed. They have a son who is blue-eyed. Please draw a pedigree showing all four grandparents, the two parents, and the son. Indicate which individuals you are certain of their genotype and where there are more then one possibility.