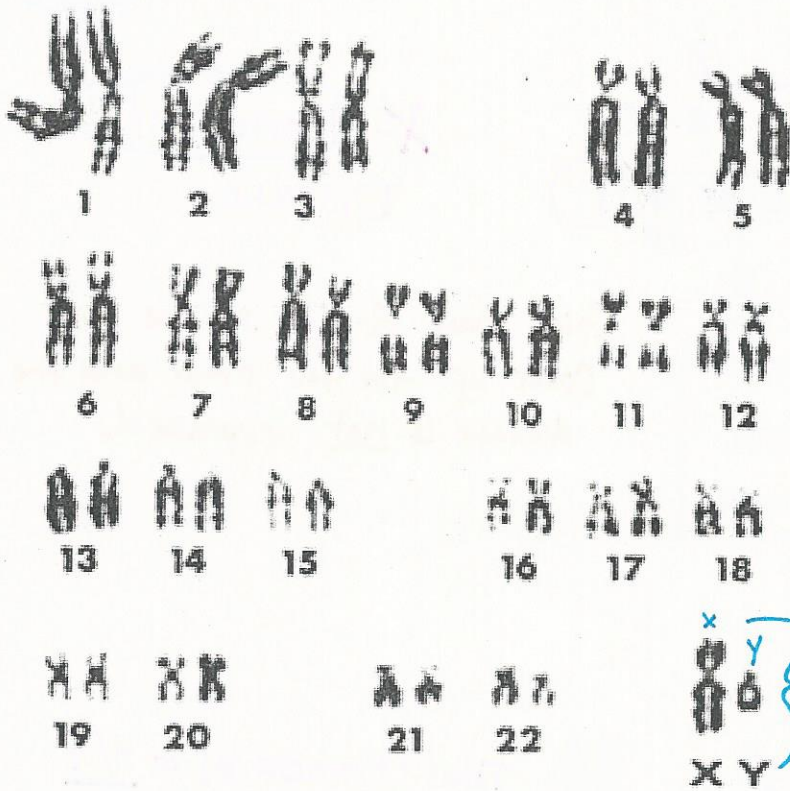


Karyotype → Chromosomes of a Human to identify sex of individual and if there's a chromosomal mutation.

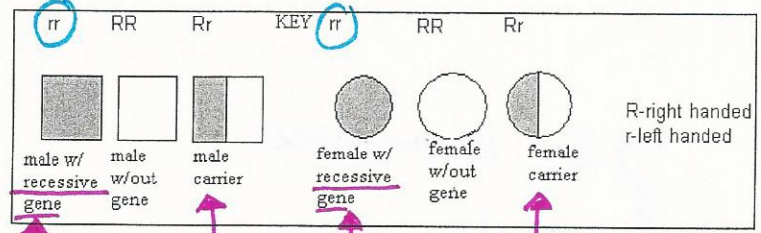
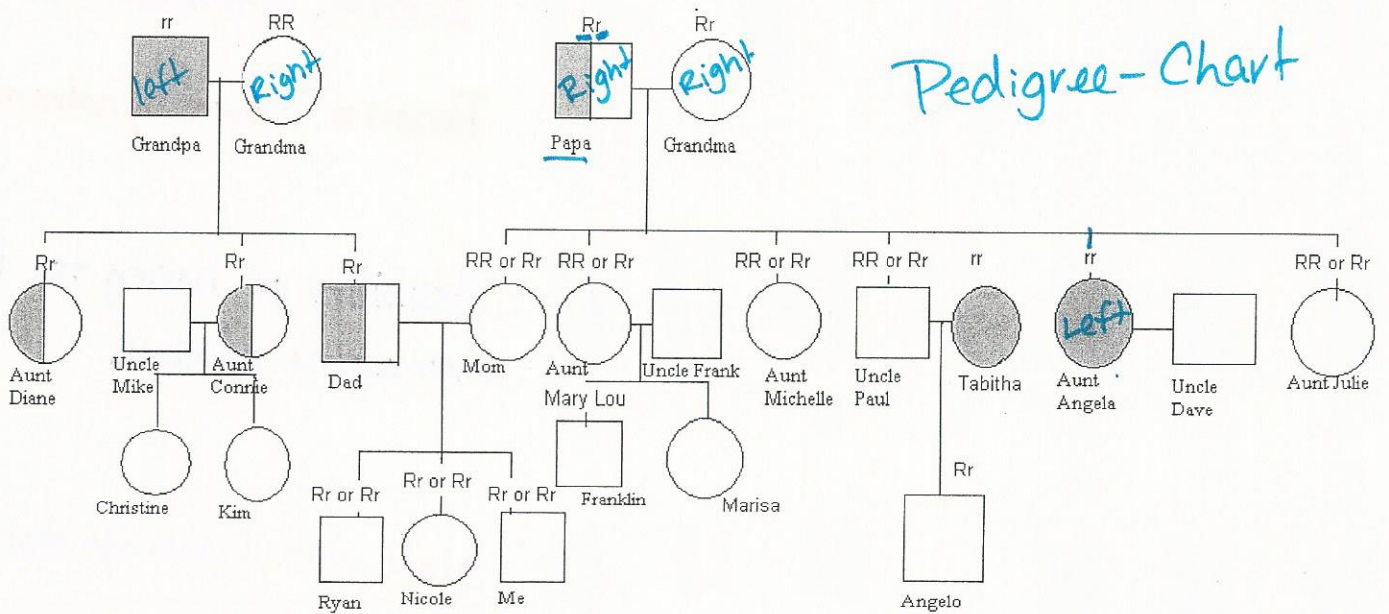


Total Chromosomes = 46
Normal Human Male

Female = XX

Sex Chromosomes
Male → XY

Pedigree-Chart

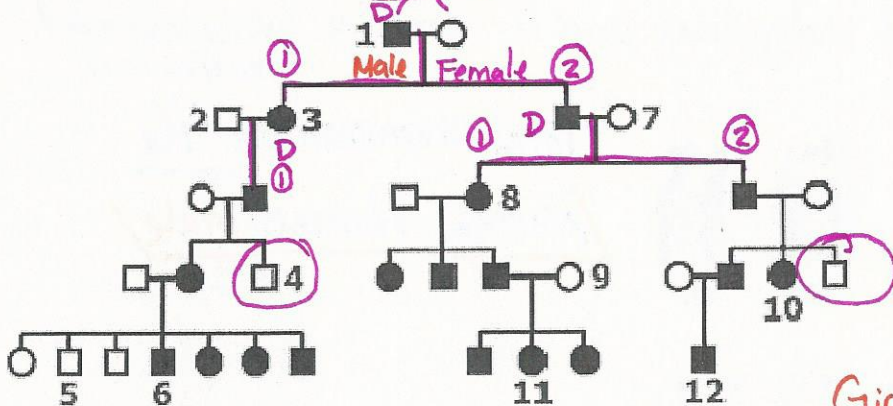


Has Disorder Carrier Has Disorder Carrier

X-linked gene = Recessive trait

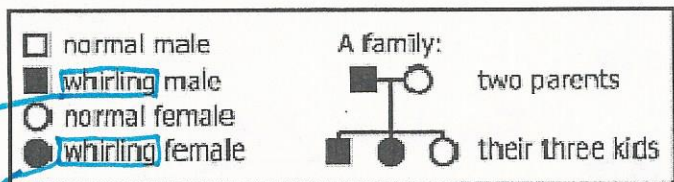
* Pedigree *

□ - Male
○ - Female
■ - Diseased Male
● - Diseased Female



X-Dominant Disease

Girls have 2-X's so one can cover up for the other and the disease is not expressed.

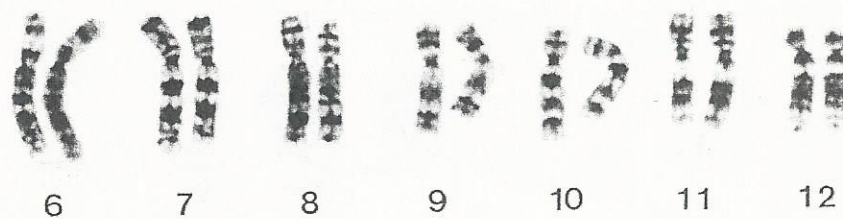


Disease
Disease



Total Chromosomes = 47
1 extra chromosome

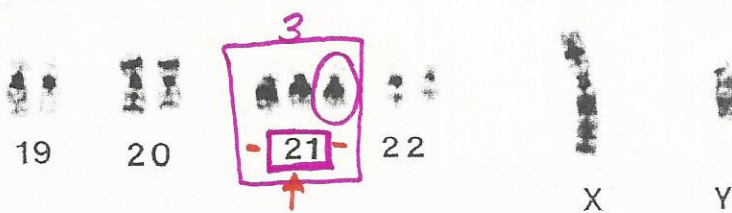
Person = Down Syndrome



Possibility of having too little chromosome number.



Male with Down Syndrome



Sex Chromosomes
Male

Down syndrome