

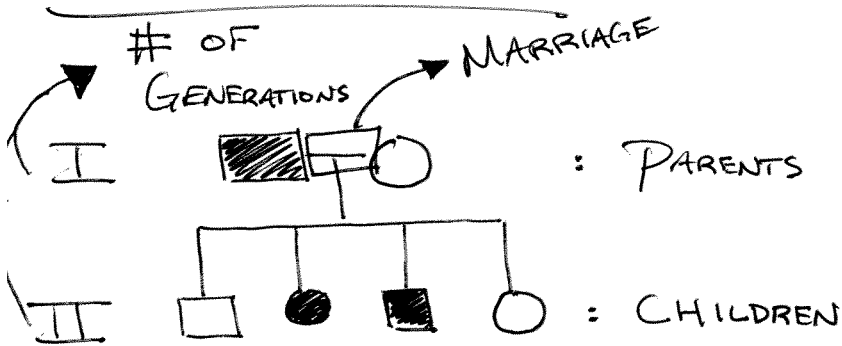
APRIL 14, 2014

PEDIGREE CHART NOTES:

I. PEDIGREES-

- SHOW A RECORD OF A FAMILY.
- USED TO STUDY HOW DISORDERS ARE PASSED DOWN FROM GENERATION TO GENERATION.

II. PEDIGREE BASICS:



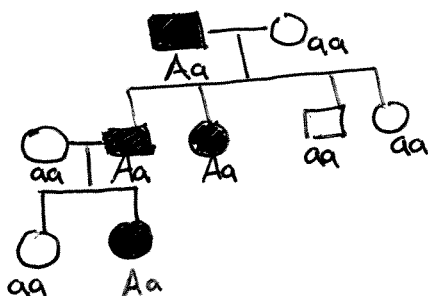
- = NORMAL MALE
- = NORMAL FEMALE
- = AFFECTED MALE
- = AFFECTED FEMALE
- ◐ = NORMAL FEMALE (CARRIER)

III. TYPES OF DISORDERS:

① AUTOSOMAL DOMINANT

- AFFECTS 1 OF THE FIRST 22 CHROMOSOMES
- DOMINANT ALLELE \Rightarrow SHOWS DISORDER
- COMMON
- FOUND IN EVERY GENERATION

EXAMPLE: HUNTINGTON'S DISEASE

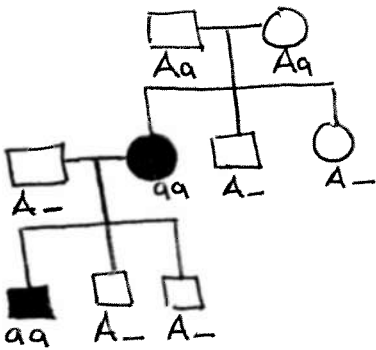


\Rightarrow FIGURE OUT GENOTYPES!

② AUTOSOMAL RECESSIVE

- AFFECTS 1 OF THE FIRST 22 CHROMOSOMES
- RARE
- SKIPS GENERATIONS
- RECESSIVE ALLELE \Rightarrow NEED BOTH RECESSIVE ALLELES TO SHOW DISORDER

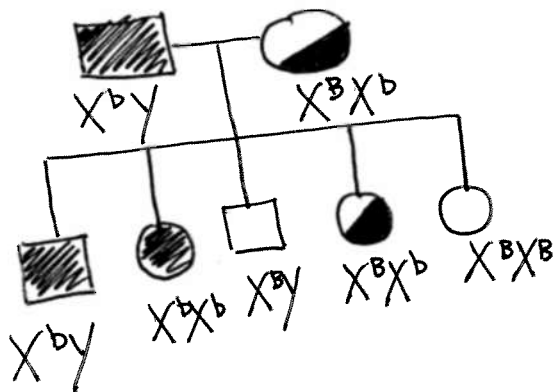
EXAMPLE: CYSTIC FIBROSIS



③ X-LINKED RECESSIVE

- AFFECTS X CHROMOSOME
- RARE
- SKIP GENERATIONS
- MORE COMMON IN MALES

EXAMPLE: COLOR BLINDNESS



KEY:

- $X^B Y$ = NORMAL MALE
- $X^b Y$ = COLOR-BLIND MALE
- $X^B X^B$ = NORMAL FEMALE
- $X^B X^b$ = NORMAL FEMALE (CARRIER)
- $X^b X^b$ = COLOR-BLIND FEMALE