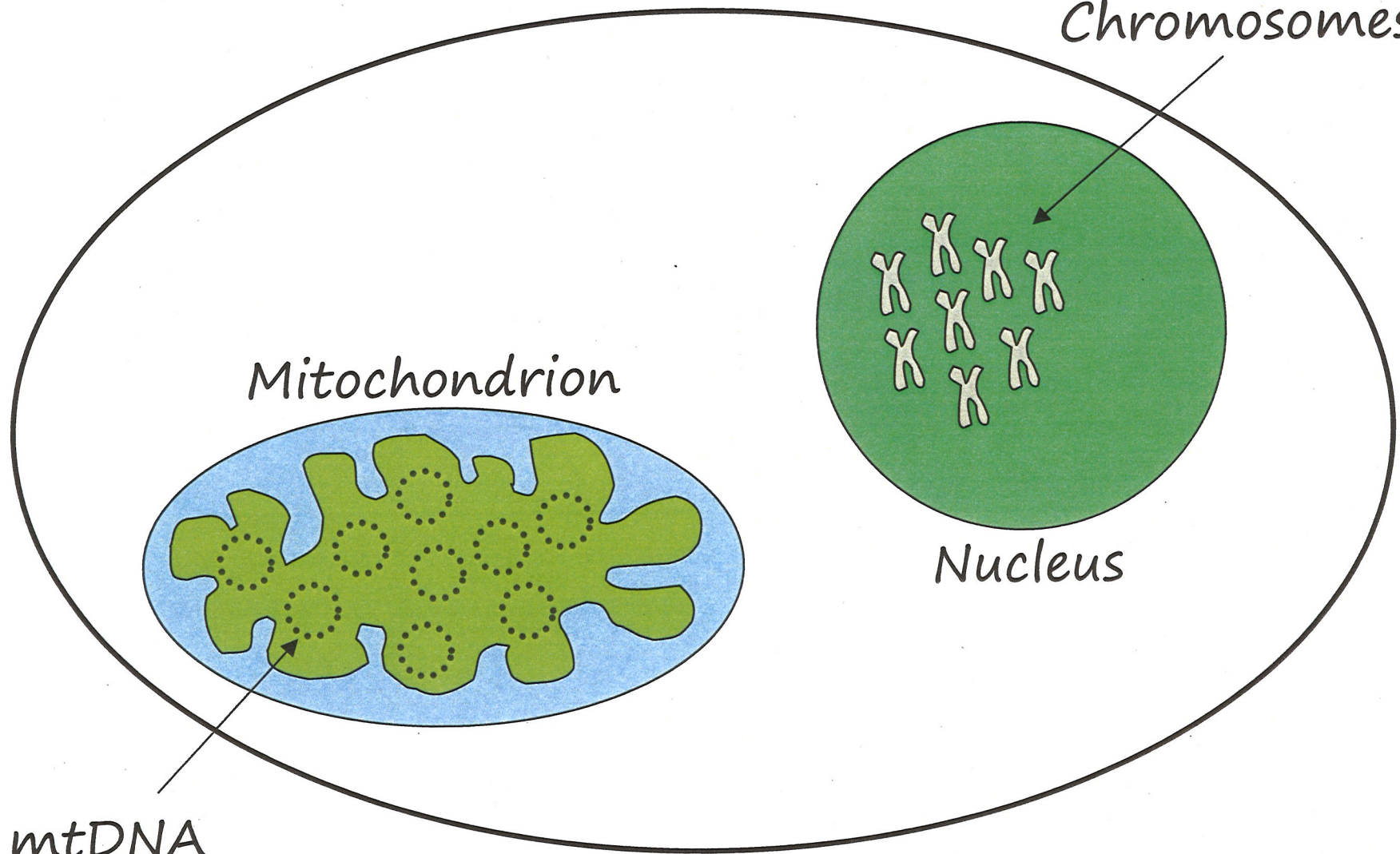


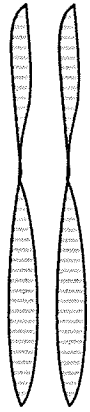
2 types of DNA in our cells

nDNA
(organized in
Chromosomes)

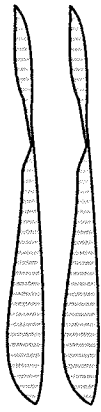


mtDNA
(circular)

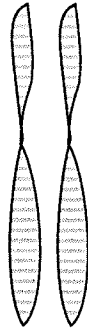
Nuclear DNA is organized
in chromosomes



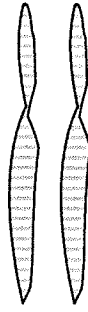
1



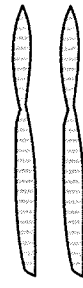
2



3



4



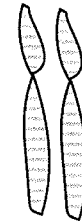
5



6



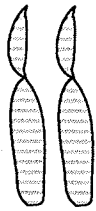
7



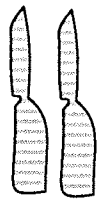
8



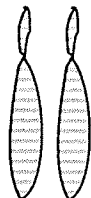
9



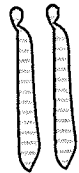
10



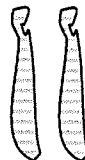
11



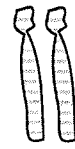
12



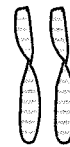
13



14



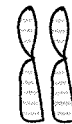
15



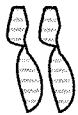
16



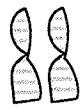
17



18



19



20



21



22

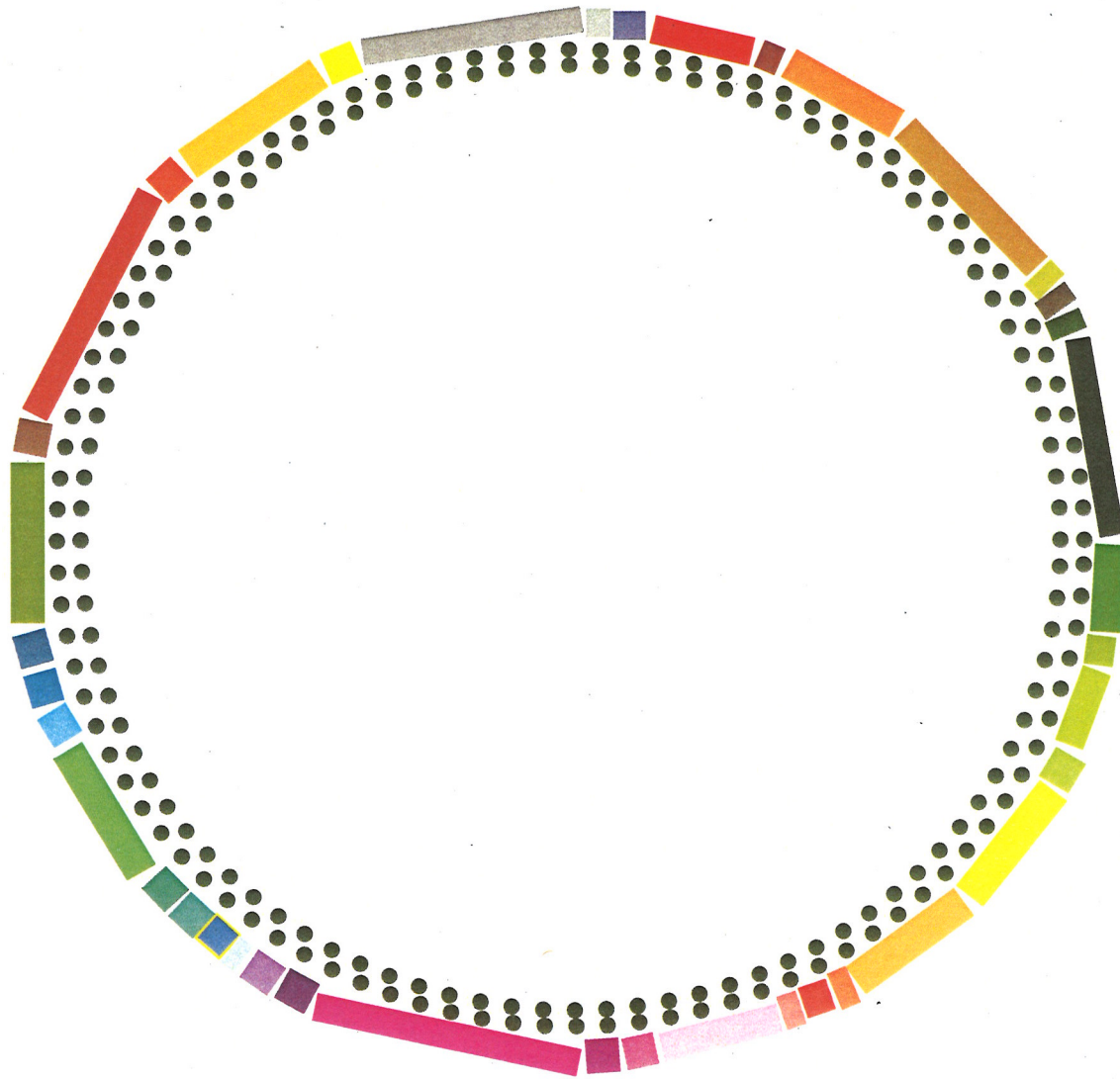


X



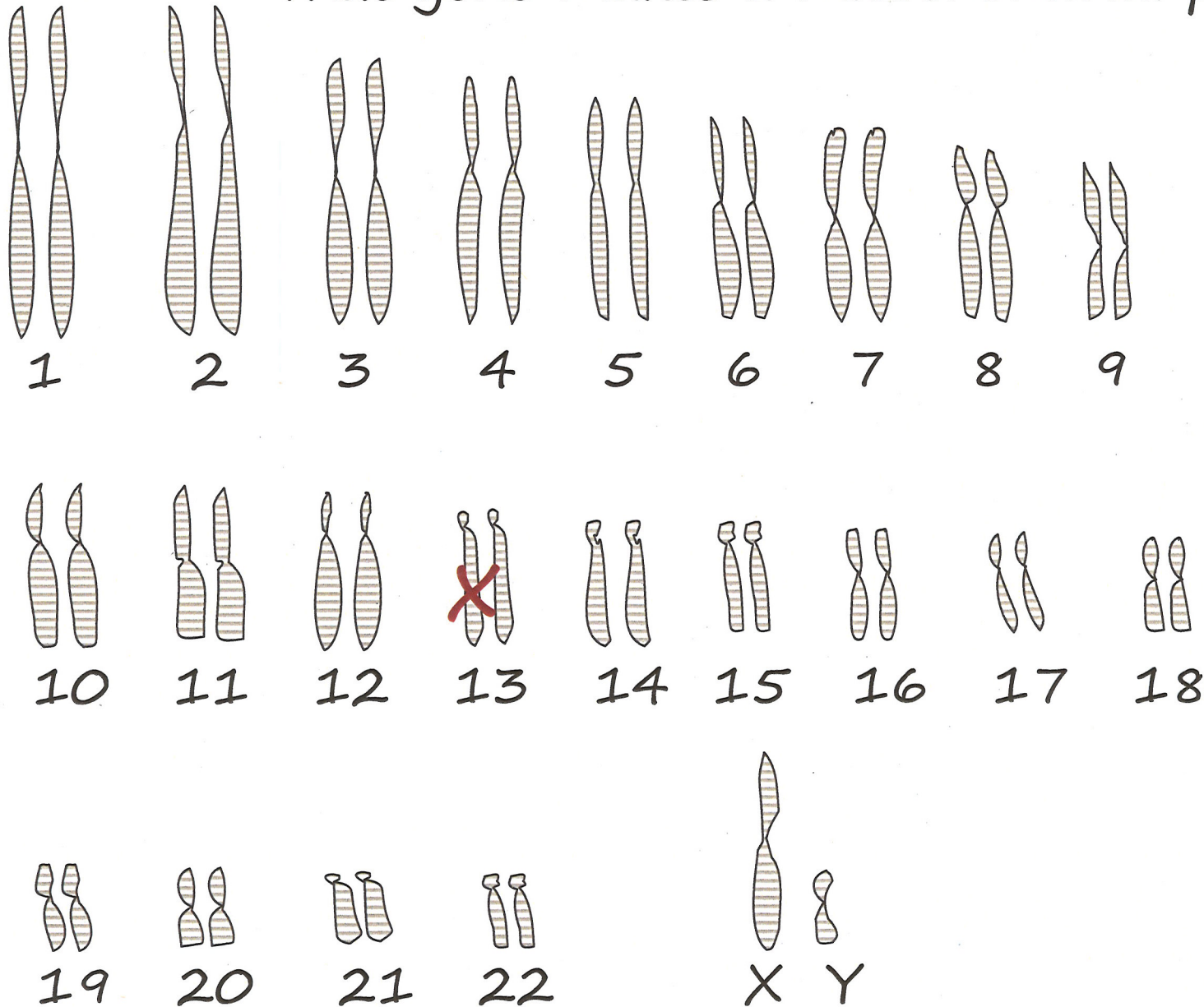
Y

Mitochondrial DNA

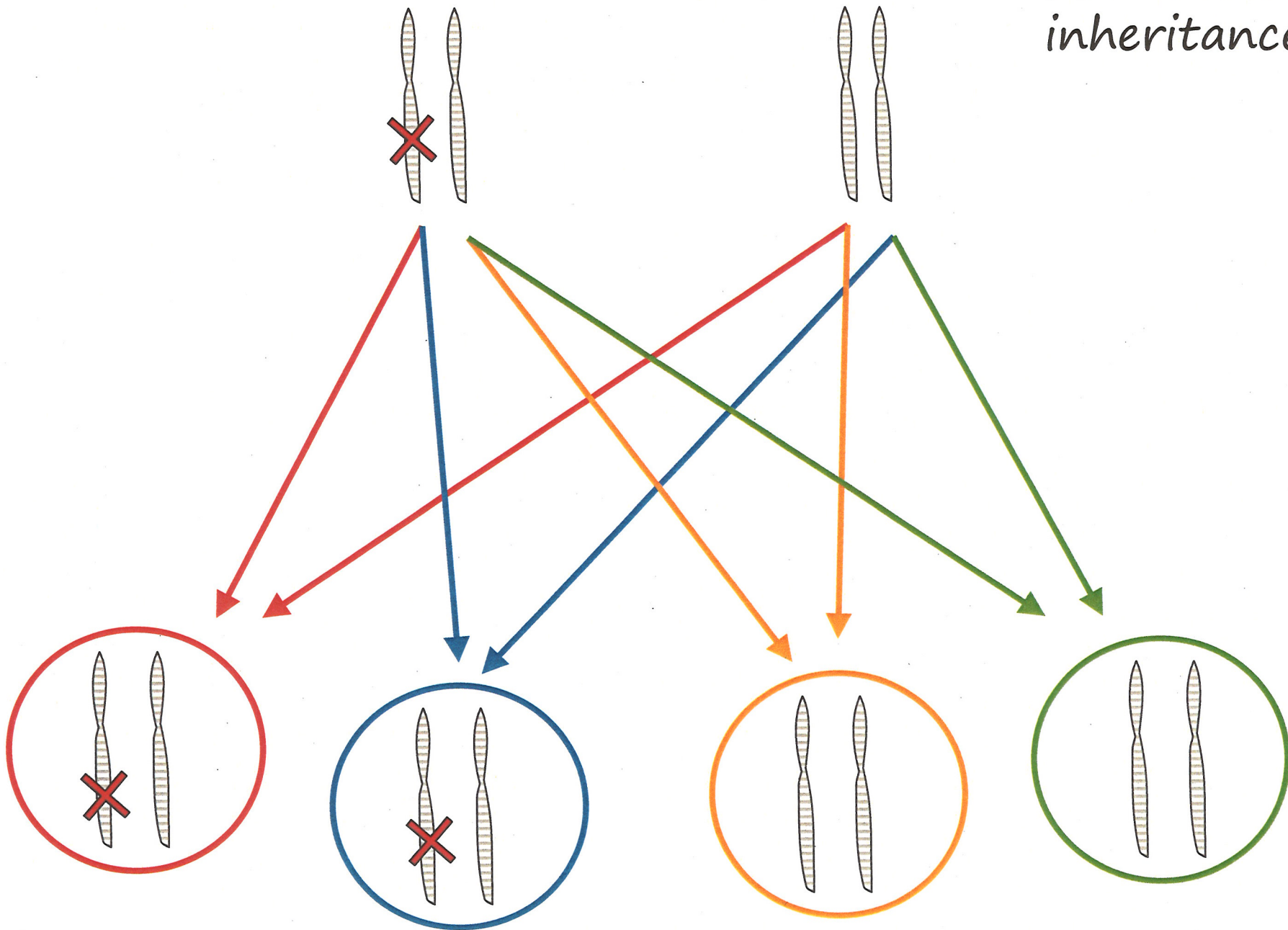


Each color represents a different gene along the mtDNA sequence

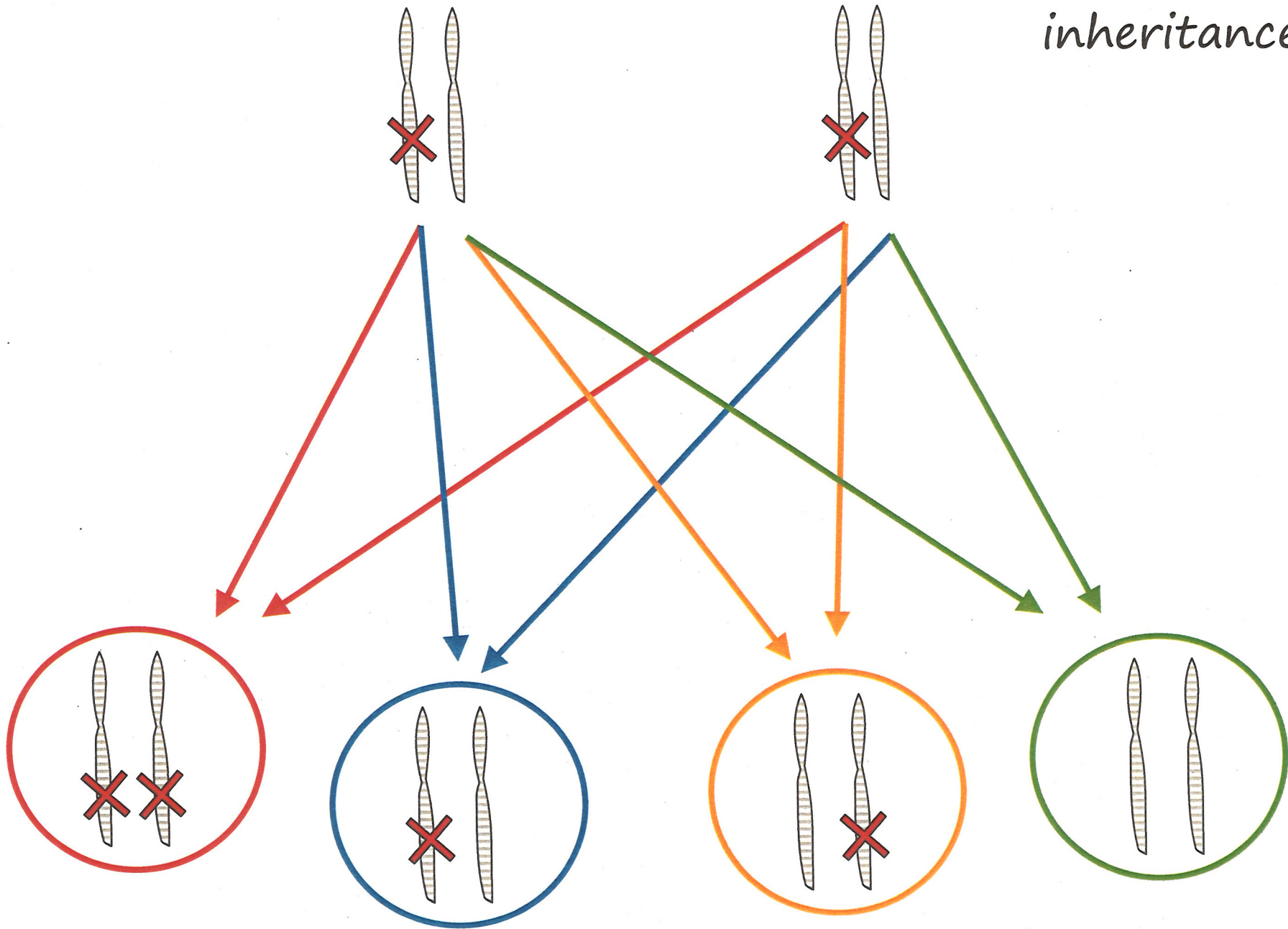
There is a mutation in a gene on chromosome 13
That gene makes a mitochondrial protein.



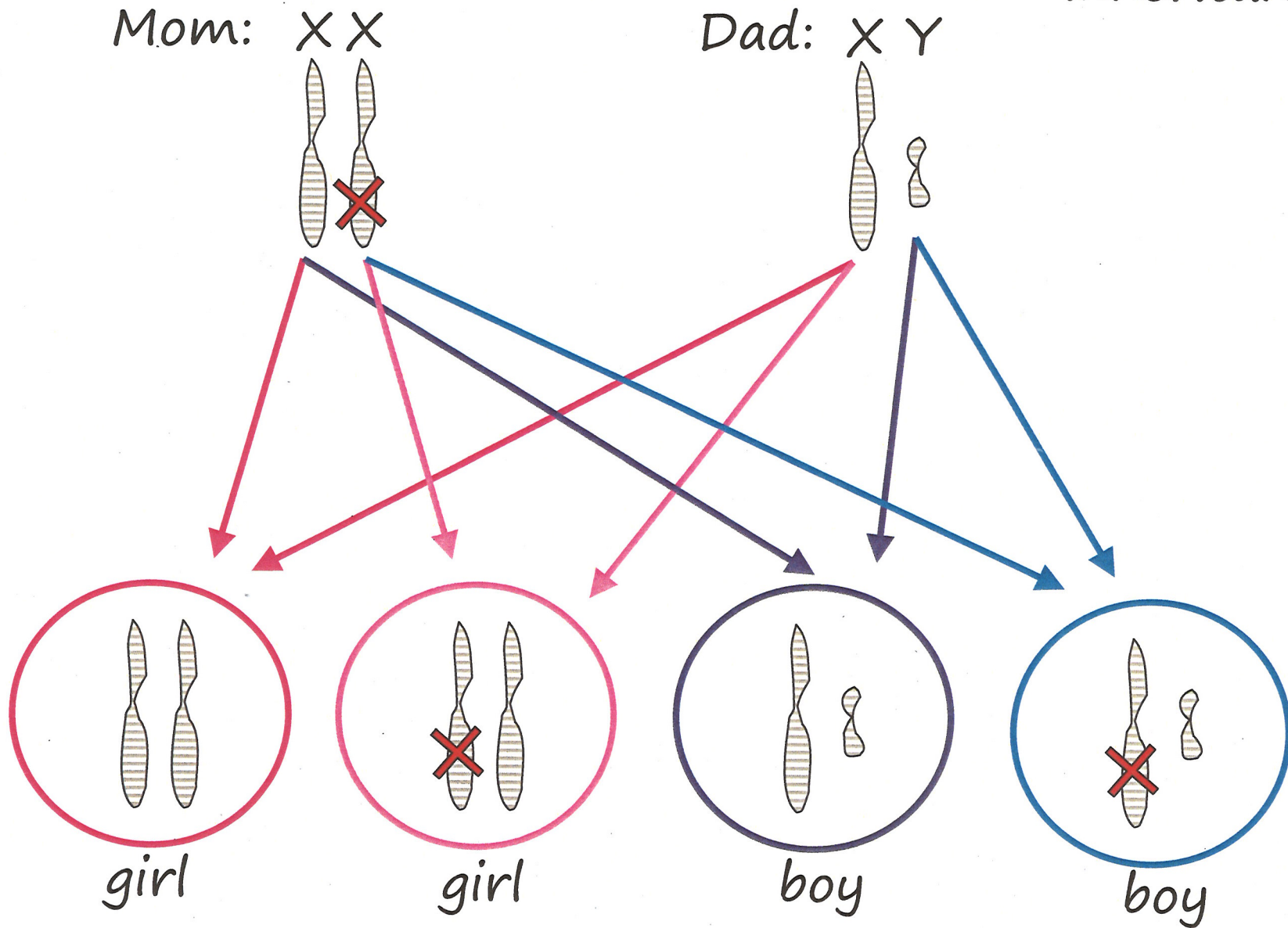
Dominant inheritance



Recessive inheritance

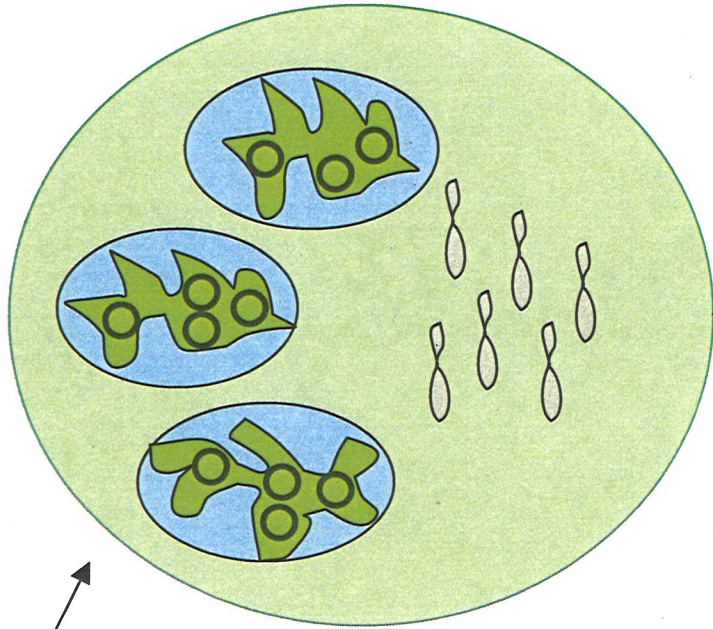


X linked inheritance

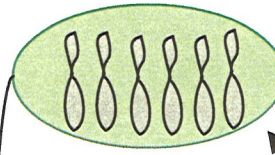


Egg

Sperm

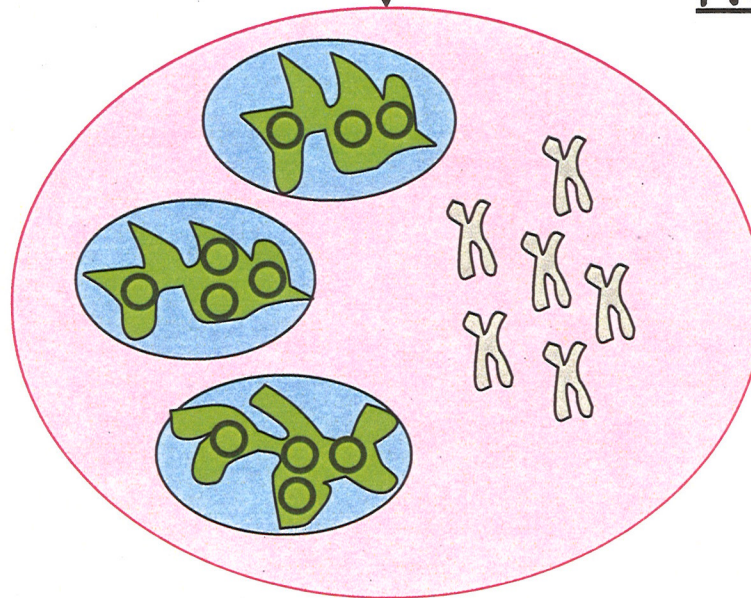


1/2 Nuclear DNA
All Mitochondria

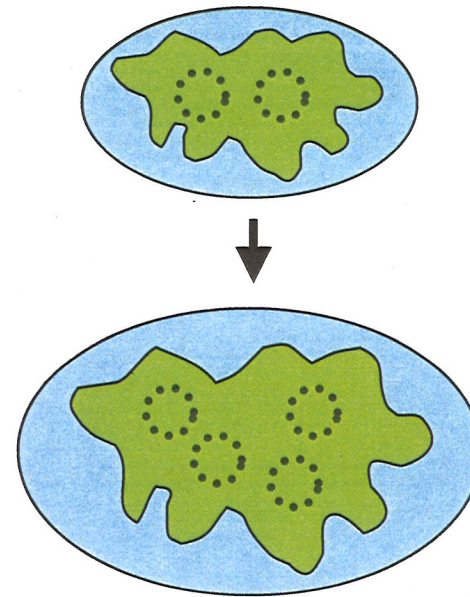


*there are mitochondria in the tail, but the tail falls off when entering the egg

1/2 Nuclear DNA
No Mitochondria



*DNA Replicates
Mito is ready to divide*



*Fission Begins
DNA is distributed randomly*

