

SNPS- Single nucleotide polymorphisms (pronounced snips) are the most common type of genetic variation in humans. Each one represents a difference in a specific DNA building block. For example a SNP is where the majority of people may have base C and in a minority of people it is replaced with Base T. Most SNPS found so far only have two alternative forms however there are some with three. SNPS underline our susceptibility to disease. For example, a single base mutation in the APOE (apolipoprotein E) gene is associated with a higher risk for Alzheimer's disease.

X-DNA - The X chromosome is different from mtDNA. The X chromosome is one of the 23 pairs of chromosomes - the 23rd pair that dictates the gender of the child. As we all know girls receive an X from both parents. Boys receive an X from mom and a Y from Dad. The exciting news is if you match someone on the X chromosome it can rule out a lot of lines especially for males. We will later go into detail on X DNA mapping/graphing!

Y-DNA- Males inherit YDNA from their fathers. Females do not inherit YDNA.

ONLINE TESTING SITES - The three most common are:

- 23andme - automatically tests autosomal DNA, gives mtDNA and YDNA (males only)haplogroups
- Ancestry.com - automatically tests autosomal DNA
- FTDNA (Family Tree DNA) - One may opt to test either autosomal DNA, mtDNA or Y-DNA