**Subclade:** Referring to a "branch" farther down the phylogenetic tree. Example: H3 -> '3' is a subclade of mitochondrial DNA haplogroup 'H'. R1b -> '1b' is a sub-clade of Y-chromosome haplogroup 'R'. Subclade testing is also referred to as SNP testing or *deep clade* testing.

Surname: A last name or family name traditionally passed down from father to son.

**Surname mapping:** The process of plotting the distribution of a surname on map.

**Time to the Most Recent Common Ancestor (TMRCA):** The amount of time or number of generations since individuals have shared a common ancestor. Since mutations occur at random, the estimate of the TMRCA is not an exact number (i.e., 7 generations), but rather a probability distribution. As more information is compared, the TMRCA estimate becomes more refined.

**Triangulation:** A method of determining the ancestral haplotype of an ancestor using the DNA results of direct line descendants.

Walk Through the Y: A Y-SNP discovery programme initiated by Thomas Krahn.

**X-chromosome**: A sex chromosome. A female child receives one X-chromosome from her father and one X-chromosome from her mother. A male child receives an X-chromosome from his mother and a Y-chromosome from his father.

**Y chromosome:** The male sex chromosome. Only males have a Y-chromosome, which they receive from their father, who received it from his father, and so on. This transmission of the Y-chromosome down the male line is why it is useful for surname testing to determine if two males share a common ancestor.

**Y-chromosomal Adam:** Also known as Y-Adam. The common patrilineal ancestor of all living males.

**Y-STR:** Acronym for **Y**-chromosome **Short T**andem **R**epeat. The number of times the bases repeat that determines the value of the marker. Example: Thirteen repeats of the same bases equals a **value of '13'**.