



DNA Notes (with thanks to Geoff Swinfield (geoff@gsgs.co.uk))

The Human Genome has 44 Autosomes (in 22 pairs) plus 2 Sex chromosomes.

The Y chromosome is received by males in direct male line.

The mitochondrial DNA shows the maternal line for all children.

DNA testing can be used for Paternity, Ancestry and Immigration.

According to which company is used and which level of test is required the cost varies from £30 to £280.

ONLY USE DNA FOR A SPECIFIC PURPOSE.

What happens: a testing kit through the post and take cells from the cheek inside the mouth.

Mitochondrial (mt-DNA) when sent in is compared with the Cambridge Reference Sequence (CRS) and the report shows the differences from the standard.

This is inherited through the maternal line and any variations indicate migrations routes.

The result can be checked against others who have had it done.

Y-chromosome for Males only. Any females would have to test via brothers, fathers, male cousins of the same line.

This can be used for determining the accuracy of a male genealogy.

1). The code can change at one specific point but this is rare. SNP (Single Nucleotide Polymorphism) possibly showing tribal divisions. HAPLOGROUPS based on SNPs show how Man moved around the world out from Africa.

2). Short Tandem Repeat. STR. There is where there is a change in the number of repeats of very short sections of the code at a particular place or marker site. This is a more frequent occurrence than SNPs and therefore more useful to the genealogist.

12 to 111 markers can now be tested.

Family Tree DNA Database. This has the largest database for comparisons.

Books:

DNA and Social Networking, Debbie Kennett. The History Press, 2011

Family History in the Genes, Chris Pomery. TNA, 2007

Trace Your Roots with DNA, Megan Smolenyak and Ann Turner, Rodale, 2004

Unlocking Your Genetic History, Thomas W Shawker. Rutledge Hill, 2004

The Seven Daughters of Eve, Bryan Sykes. Bantam Press, 2001

Adam's Curse, Bryan Sykes. Bantam Press, 2003

Blood of the Isles, Bryan Sykes. Bantam Press, 2006

The Origins of the British, Stephen Oppenheimer. Constable and Robinson, 2006

Useful websites and gateways to surname projects:

International Society of Genetic Genealogy (ISOGG)	www.isogg.org
Your Genetic Genealogist (CeCe Moore)	www.yourgeneticgenealogist.com
Chris Pomery	www.dnaandfamilyhistory.com
Journal of Genetic Genealogy (JOGG)	www.jogg.info
World Families.net (associated with Family Tree DNA)	www.worldfamilies.net

Testing Companies' Websites:

Maximum markers tested

Family Tree DNA includes and Family Finder	www.familytreedna.com www.ysearch.org http://www.familytreedna.com/family-finder-compare.aspx	111 (also does 12, 37, and 67)
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23andMe www.23andme.com
includes Relative Finder (very similar to Family Finder from FTDNA)
and also scores possible susceptibility to hereditary diseases and links to those with identical areas of the genome

Ancestry.com www.dna.ancestry.com 46
ethnicity test: AncestryDNA (USA only)

The Genographic Project <https://genographic.nationalgeographic.com>

DNA Worldwide www.dna-worldwide.com 67 (also offers 12, 25 and 37)
uses FTDNA for testing - see above