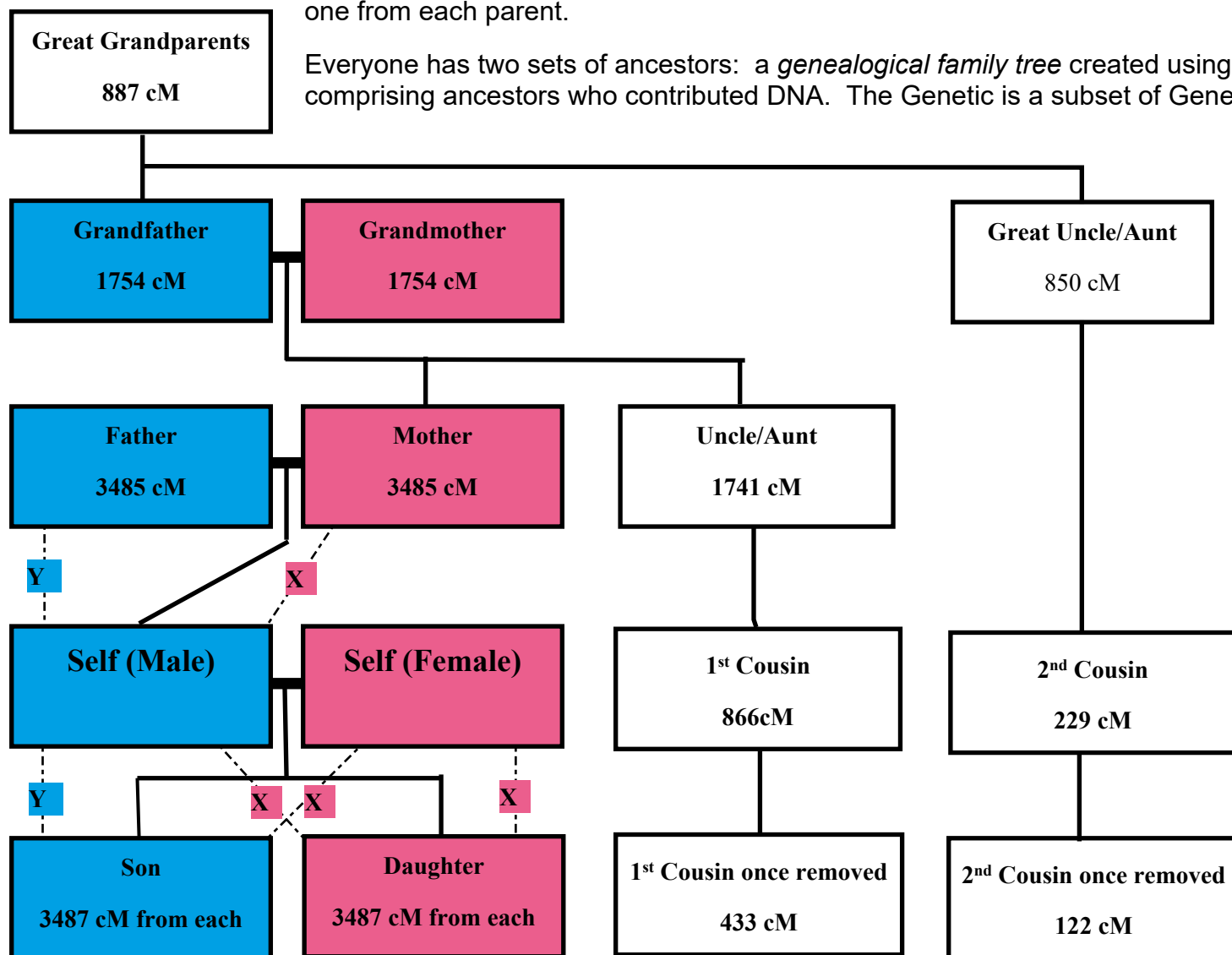


DNA for Family History

Inherit 50% (average 3485 cM) from each parent as a random mix. Autosomal (atDNA) test is the most common. atDNA refers to the 22 pairs of non-sex chromosomes within the nucleus of every cell. The 23rd pair of chromosomes determines the sex. Males get a Y-DNA from their father and an X-DNA from their mother. Females get two X-DNA, one from each parent.

Everyone has two sets of ancestors: a *genealogical family tree* created using records and a *genetic family tree* comprising ancestors who contributed DNA. The Genetic is a subset of Genealogical Tree.



Siblings share 2629 cM

Matches: Those people with whom you share DNA. The total amount of DNA you share is measured in centimorgans (cMs). The higher the number, the more closely you are related.

Shared Matches: This shows groups of relatives that all share DNA.

Shared cM Project: This chart gives the relationship, average cM & range and can be found online. You will always share DNA with a second cousin or closer, but the likelihood diminishes rapidly for fourth cousins and beyond.

Ethnicity Estimation: Indicates the geographical origins of an individual's DNA by comparing that DNA to one or more reference populations.

Common Ancestor: A shared ancestor between you and at least one DNA Match.

Remember: Relationship predictions are just estimates and need further research.

Develop a Strategy:

- What do you want to achieve?
- Build *genealogical family tree* on-line or upload GED file.
- Decide which test to take and with which site. Initially you should do an *Autosomal (Family Finder)* test. The main sites are Ancestry DNA, Family Tree DNA and My Heritage DNA.
- Consider downloading your *Raw Data* and uploading it to another site. Open account with new site and then upload.
- Ancestry and 23&me do not allow uploads, but you can download. Wait for next sale if you are not in a hurry.
- Males: Think very carefully before you do a Y-DNA test with Family Tree DNA. It is complicated and the data base is small.
- Check out matches and Shared Matches. Use “*Chromosome Browser*”, “*In Common with*” or “*Not in Common with*” tools and identify Shared Matches.
- Examine shared DNA and ages for possible relationship and look for a *common ancestor* on your tree and their tree. Compare ethnicity. Build a copy of their tree if necessary.
- Ancestry “*ThruLines*” illustrates how you may be connected to a particular DNA match through a common ancestor.
- Try and establish the age of your *Match* as this could show if they are a cousin, or once or twice removed.
- If you are using more than one site make a common list of the best matches and start with closest. Colour code.
- Take screen shots of important finds. They might disappear.
- Research thoroughly before contacting a match.
- Use GEDMatch (Free Tool) “Are your parents related?”.
- Consider the “Leeds Method for DNA Matches” (Google).
- Consider WATO on DNA Painter to analyse an unknown person.

Your Notes:

Suggested Reading:

- The Family Tree Guide to DNA Testing and Genetic Genealogy (2nd Edition) (in Lewes Library) by Bettinger.
- The Adoptees Guide to DNA Testing by Tamar Weinberg.