Grouping DNA Matches on Ancestry by Branches of the Family Tree

[Video Link]

Preface

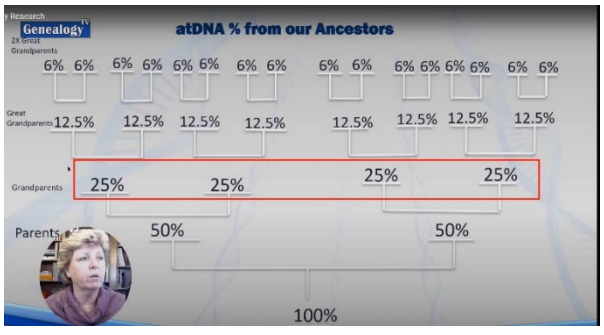
Autosomal DNA is the type of DNA we are focused on today. This is what I call the shotgun blast of DNA since it brings in DNA from all four of your grandparents and beyond. Autosomal DNA is the only test Ancestry provides, and you will also find it at all other DNA providers.

Parental Sides

In 2023, Ancestry introduced automatic grouping for parental sides, allowing you to easily separate your paternal matches from your maternal ones. At RootsTech 2023, they also announced plans to further divide DNA Cousin Matches into the four groups representing your grandparents. However, over a year later, this feature has yet to be implemented. In the meantime, we will manually group the four branches of your family tree using this method. Once you learn this approach, you can extend it to higher generations, such as your great-grandparents, and beyond.

DNA Basics

In 2022 I produced a video called DNA Basics. If you are very new to DNA, I suggest you watch that video first to give you a foundation from which this lesson will make more sense.



1 DNA Basics Video on GTV

Getting DNA from Each Parent

Briefly, you get about 50% of your DNA from each of your parents, as did they. Therefore, you have roughly 25% of the DNA from each of your grandparents. In this lesson we are focused on the concept of grouping your DNA matches into the four branches representing your grandparents lines.

Have You Taken a DNA Test?

If you have not done so already and would like to buy a DNA kit from Ancestry, here is my affiliate link that helps support the Genealogy TV channels. They also make great gifts but ask family before purchasing a DNA kit. They have the right to say no. Below are my affiliate links if you wish to help support the channel.

AncestryDNA + Traits (U.S.)
AncestryDNA (U.S.)
AncestryDNA (UK)
Ancestry World Explorer (U.S.)

Expect Surprises

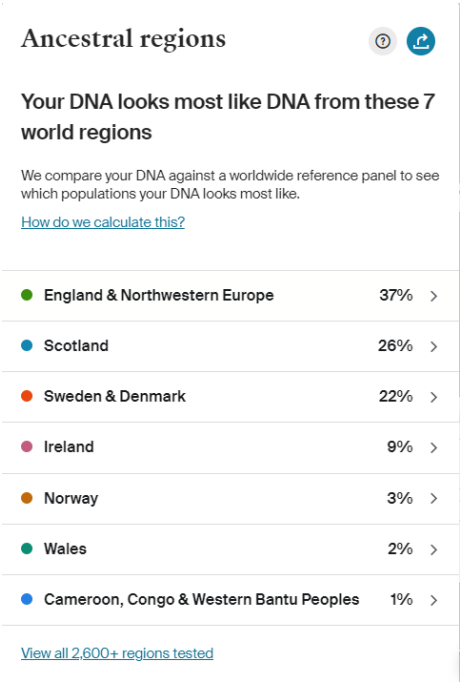
Whenever one takes a DNA test, you never know what you might learn. Therefore, test takers should be ready for unexpected surprises in the form of newly found relationships they might not have known existed.

Difference Between Ethnicity Results and DNA Matches

What is the difference between ethnicity estimates and DNA Matches?

Ethnicity Estimates

Ethnicity estimates are *estimates* of your geographic origins. This is based on your DNA inherited and where those genetic ancestors are known to be from. However, keep in mind that ethnicity estimates are "estimates" based on family tree and other data. **As research and DNA reference panels grow, estimates will change over time.**

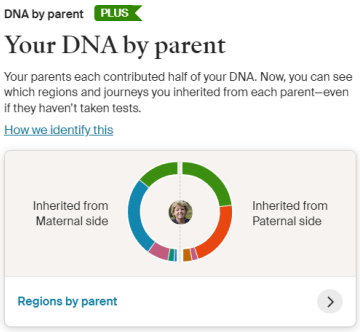


The estimated ethinicity can be helpful when trying to determine the possible homelands from unknown branches of the family. For example, I know that **24% of my DNA comes from Denmark & Norway** on my **father's side** of the family. I have researched this and one quarter of my tree comes from the Danish homeland.

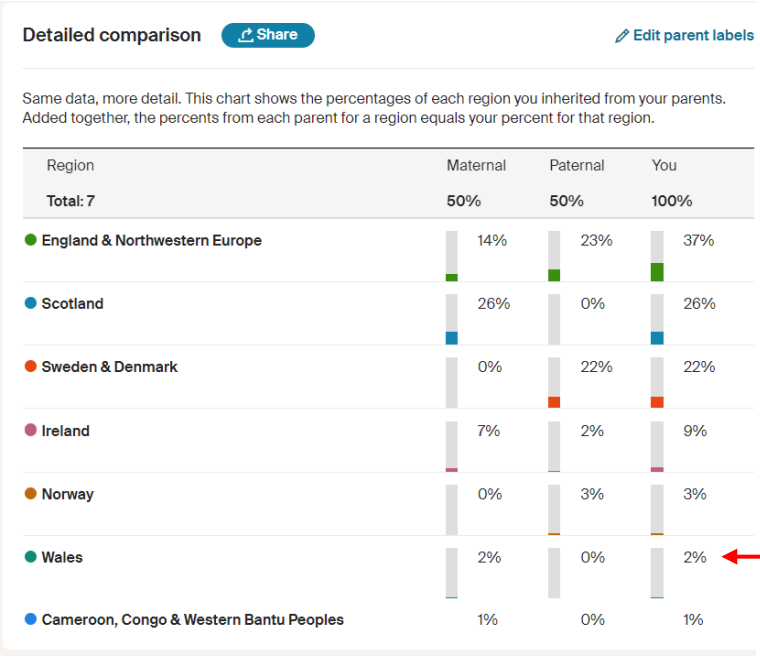
I also know that the other **25 % of my paternal side comes from England**. Since my mother was adopted we knew very little about her side of the family, so through **process of elimation** we have about **17% left from the England and Northwest Europe** and a large **(26%) from Scotland**, and **(7%) from Ireland**. There are no Scottish or Irish ancestors on my fathers side, so this must be coming from my mothers side.

DNA by Parent

We can also see ethnicity by parental sides by drilling into the DNA by Parent. On **Ancestry** go to **DNA**, then **Origins**, then **scroll down** the right side panel until you see **Your DNA by Parent** and **click** into the **Regions by Parents** link.



Then scroll down to the Detailed Comparison. Here you can see which side of the family you are getting your DNA estimates from.



Here you can see that the Scottish and Irish are coming primarily from my mother's side of the family along with some English. There is a 2% sliver from Ireland on my father's side. Estimates may change over time as more people get tested.

If you do the division for each generation (50% from each parent, then 25% from each grand parent, and so on) you can guess that the 2% DNA might come from your 4x-5x great grandparents.

DNA Matches

DNA matches are genetic connections that are factual based on science. In these matches you will see centimorgan (cM) counts. This is a unit of measurement that shows you how closely related you are to each DNA match. The higher the number, the closer you are related. Ancestry (as well as other platforms) will give you a predicted or estimated relationship. However, because genetic relationships overlap in centimorgans, there may be more than one possible relationship, when you are not closely related (such as a parent-child relationship or full siblings). DNAPainter is a great tool for seeing all possible relationships by cM count or percentage of DNA. Here is an example of the various relationships for someone who matches at 250 cM.

2 DNAPainter.com

Why Group DNA Matches

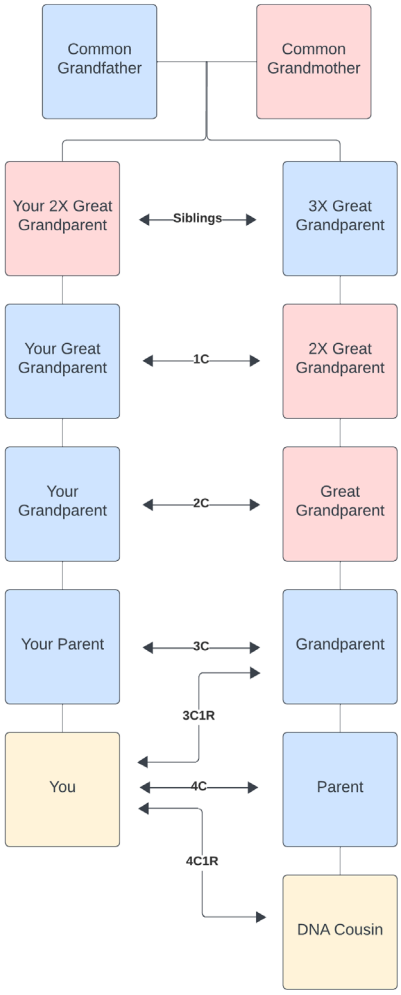
Grouping the **Known Matches** and researching the **Unknown Matches** can help solve mysteries in your family tree. Regardless of if you group DNA matches or not, researching match trees and seeing what records they have collected for your ancestors may help verify your suspected ancestors.

The Concept of Grouping

Everything we do in genealogy, including DNA research, is **working from the known to the unknown.** Therefore, as we group our DNA matches into family groups (along branches of the tree) we are starting with the DNA matches we know, grouping them, and then seeing what is left or ungrouped. This process of elimination will help us discover DNA matches in branches we have yet to reveal in our family tree.

Understanding Common Ancestors and Cousin Relationships

Common Ancestors are ancestors you share with another person. Sometimes the common ancestor may be way up the tree. In the graphic here you can see an example of a DNA cousin who is a 4th cousin, once removed (4C1R).



Ideally when we are grouping matches, we want to find a closer match. The best cousin range to group the matches by the four grandparent branches is to use 2nd cousins from each branch of the family.

The G Rule

A quick way to know what cousins you have found (when you know who the common ancestors are) is what I coined as the G Rule. **Count the G's** for each **Great** and including **Grand**. So, if you found a DNA cousin who you share **G**reat **G**reat **G**randparents with, he or she is your 3rd cousin. If there is a generational difference, then add once removed. If there were two generational differences, then add twice removed.

The G Rule is not a perfect rule but helps in many cases. Keep in mind that you may have half relationships too, which might complicate your analysis. When in doubt, use the Shared Matches tool on DNA Painter to help you figure it out.

Ancestry's ThruLines® may help you figure out the relationship between you and your DNA cousins. However, ThruLines® is just an estimate based on other member trees along with DNA and may be incorrect. It is just a hint feature. Always verify with records!

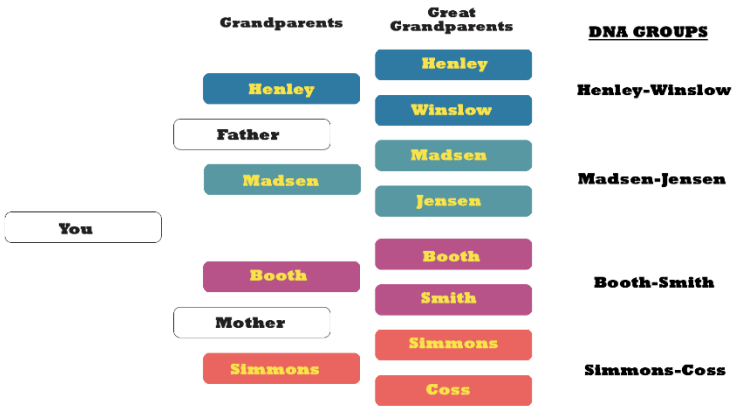
Start with a Plan

While you could dive right in, it is best to start with a clear plan. Outlining your DNA groups before you begin will help keep you organized as you work through your matches.

You can group your DNA matches in any way that works for you. In this lesson, I will show you how to group them based on the four branches of your grandparents' family tree.

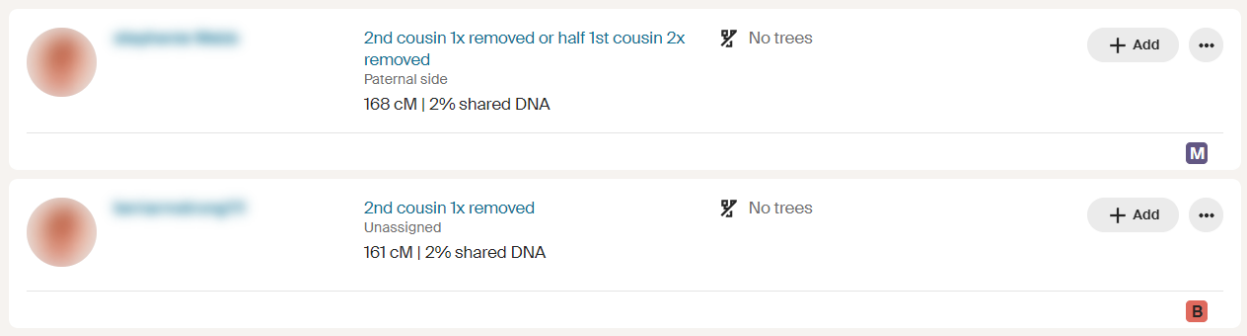
Map Out the Branches

In this example, I have used the new color codes provided by Ancestry and applied them to the family tree in the Ancestor view. You will notice that the cooler colors represent the paternal side, while the warmer colors represent the maternal side. This helps you quickly identify which side of the family your DNA cousins come from when viewing the entire unfiltered match list.



Using the surnames of the eight grandparents we have created four groups that will ultimately represent the four branches of the family tree.

To start assigning groups and colors to your DNA matches, go to the DNA tab, then select Matches to view your unfiltered match list. If you have not done this before, you will not see any groups or colors yet. However, once you have grouped them, your list may look something like this. The DNA matches in this example have been blurred for privacy reasons. As Ancestry continues to roll out these tools, some of you may see colored dots. In this example, we see colored squares along with the first letter of the group title.



Initially, you may see just one letter next to each DNA match, but as you research, you may find DNA matches have multiple letters and colors assigned to each of them.

Grouping by Branch

Some of this process may involve using Ancestry's new Pro Tools (an add-on to your subscription). Here is a brief overview. We are starting with just one group.

1. **Create a group** for your **great grandparents as a couple into one group**. For example, Madsen-Jensen (the surnames of my great-grandparents).
    a. **Assign a name.**
    b. **Assign a color.**
2. **Looking at your DNA Matches, find your "best-known match"** that you know descends from this great grandparent couple.
3. **Click into your BEST KNOWN** match.
4. Use the **SHARED MATCHES TOOL** (Pro Tool).
5. **Color code everyone in the shared matches list with the same color**, as they are from that branch of the tree. They either descend from that couple or through that branch higher in the family tree.
6. **Repeat this process with the best-known match from another branch of the tree**.

Research DNA Matches by Groups

Once you have created a few groups, the fun begins. You can use the filters at the top of your unfiltered DNA match list to find DNA cousins who might hold clues to your ancestry. The important thing about these filters is that they are stackable. Instead of being an OR filter, they work as an AND filter, allowing you to refine your search. For example, you can filter by a group you have created and then add a search for a specific surname you are investigating. This layered filtering can help you uncover more targeted insights into your family history.