

COMMON DNA TEST QUESTIONS-October 2019

Which test should I take?

Y DNA: This is for males only. It tests the Y chromosome that only men possess, and results show those who match on the father's line from father to father to father, etc.

mtDNA (Mitochondrial DNA): This tests the mother's line. Both men and women may choose this test even though only women pass the mitochondria to their children. The results show those who match on the mother's line from mother to mother to mother, etc.

Autosomal: (atDNA) Testing companies generally sell the autosomal test. It tests all 23 chromosomes inherited from both parents. Some testing companies do not show the result for the 23 chromosome.

For more information, check out our handout "Types of DNA Tests."

Also, these websites may be helpful:

[https://dna-explained.com/which-dna-test-is-best/;](https://dna-explained.com/which-dna-test-is-best/)

[https://dnaandfamilytreeresearch.blogspot.com/2016/04/which-dna-test-is-best-for-me.html.](https://dnaandfamilytreeresearch.blogspot.com/2016/04/which-dna-test-is-best-for-me.html)

Which testing company should I use?

Today, there are four major companies in the DNA testing market:

23andMe

Ancestry

Family Tree DNA

MyHeritage.

23andMe, Family Tree DNA and MyHeritage have more robust technical tools for comparing your DNA with your matches. *Ancestry* has the biggest database by far and you may have more matches.

For more information, check out our handout "DNA Testing Companies Comparison."

How does DNA testing help me with my genealogy research?

You buy a DNA test to validate the paper genealogy that you already have. For your DNA test to be of any use in this way, you must have test results from known relatives to compare with yours. This way you will know which of your matches, your mother's niece, for example, are matches from your mother's side of the family. It is best to test the oldest members of your family to compare with your DNA to reach as far a reach as possible. Autosomal tests have limits that do not go back too far back in time. The older your testers, the further back you will get results. If you want further detailed information, you will need an online tree that will go back in your family history as far as possible. The helpfulness of an online tree cannot be emphasized enough.

How accurate are the results?

You should think of the ethnicity results as somewhat accurate. Accuracy depends on the makeup and size of the company's database of customers as well as the algorithm they use. As for the DNA matches you have, the closer related to you, the more accurate the results: "3rd and 4th cousin" results are less accurate than "2nd cousin" and closer.

Who can take the test? I've heard it's only for men?

Only men may take the Y DNA test. The mtDNA and Autosomal tests are for everyone. For more information, please check out our handout "Types of DNA Tests."

What about protecting the privacy of my DNA sample and results?

If the privacy of your DNA sample concerns you, you should comparison shop about privacy as well as cost and accuracy. Each company's website details how they protect your privacy and who has access to your results.

For additional information, check out:

[https://www.consumer.ftc.gov/blog/2017/12/dna-test-kits-consider-privacy-implications:](https://www.consumer.ftc.gov/blog/2017/12/dna-test-kits-consider-privacy-implications)
[https://www.myidcare.com/articles/single/the-privacy-risks-of-dna-testing.](https://www.myidcare.com/articles/single/the-privacy-risks-of-dna-testing)

Will my matches have access to my private information?

Your matches will only have access to your results if you allow it. Some companies offer different options of access you can allow to other users.

Why doesn't the ethnicity match what I've been told by my family?

There can be several reasons for this and some are a bit complicated:

- There is something called "trait decay" which means you didn't inherit that piece of DNA from your parents.
- Perhaps the testing company's algorithm groups ethnicity differently than you would expect. For example, Western European may include German and British together.
- The testing company may be using different measures of time. More current versus deep ancestry (10s of 1000s of years ago).
- The testing company creates ethnicities based on their own customers as a "reference population." If they do not have enough customers with Asian ancestry, they may be weak in that area.

For additional information, checkout our handout "Your Ethnicity"

Excellent websites for general Genealogy DNA information:

<https://dna-explained.com>
https://isogg.org/wiki/Beginners%27_guides_to_genetic_genealogy