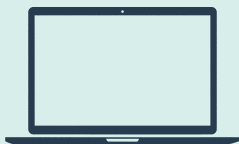


# GETTING STARTED WITH DNA PAINTER

DNA Painter is an award-winning website that can help demystify your DNA results. The site is available at <https://dnapainter.com/>. It hosts a variety of tools aimed at helping genealogists who are working with DNA. You can use many features without logging in, but if you want to create a chromosome map or tree, you will need to register.

## REGISTERING



Setting up an account at DNA Painter is free. You will need to validate your email address by clicking on a link before you can log in. If you need more help, please read the guide at <https://bit.ly/3dftPsn>

ONCE REGISTERED YOU CAN:



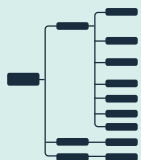
### MAP CHROMOSOMES

TRACK WHICH PIECES OF DNA YOU INHERITED FROM SPECIFIC ANCESTORS



### CREATE ANCESTRAL TREES

VISUALIZE AND OPTIONALLY SHARE YOUR FAMILY LINE WITH AN ELEGANT TREE AND FAN CHART



### EXPLORE WATO AND OTHER TOOLS

ENTER SHARED DNA AMOUNTS TO PREDICT POSSIBLE RELATIONSHIPS WITH MATCHES

## HELP AND ADVICE

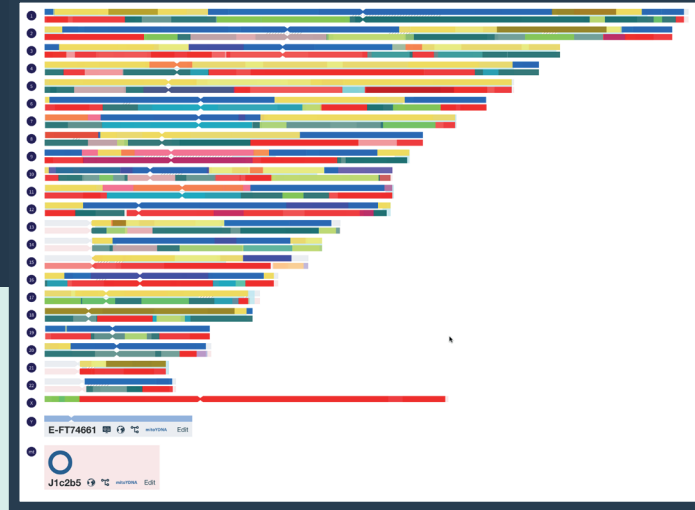
If you use Facebook, I recommend joining the DNA Painter user group at <https://bit.ly/31pUKPM>  
You can also contact [info@dnapainter.com](mailto:info@dnapainter.com) or @dnapainter on Twitter or [dnapainter.bsky.social](https://bsky.social/dnapainter) on Bluesky

CONTINUED ➔

# DNA PAINTER

DNA Painter was originally built for chromosome mapping, an activity that some people find compelling and addictive. To help you decide if it's for you, I recommend reading

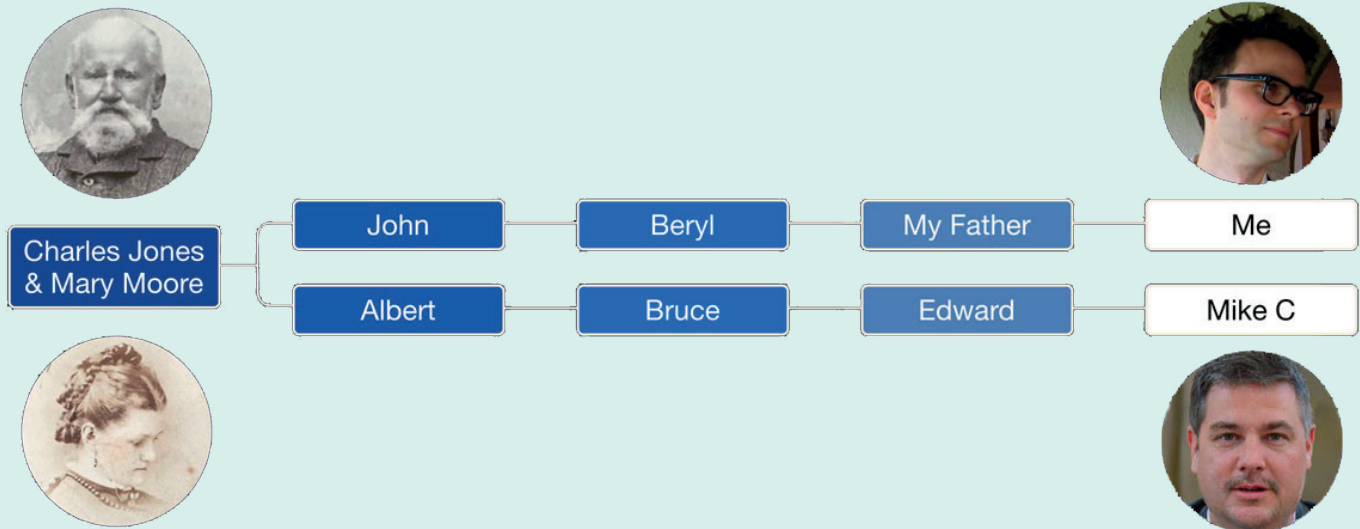
['Why map your chromosomes?' https://bit.ly/3G5n9cE](https://bit.ly/3G5n9cE)



## CHROMOSOME MAPPING

This is the process of taking the segments of DNA that you share with a DNA match and mapping them to the ancestor you inherited them from.

- You do this by inferring the source of the DNA based on how you are related to the DNA match.
- For example, in the example pictured below, I can infer that the segments I share with my third cousin, Mike C, were inherited from my great-great-grandparents, Charles Jones and Mary Moore.



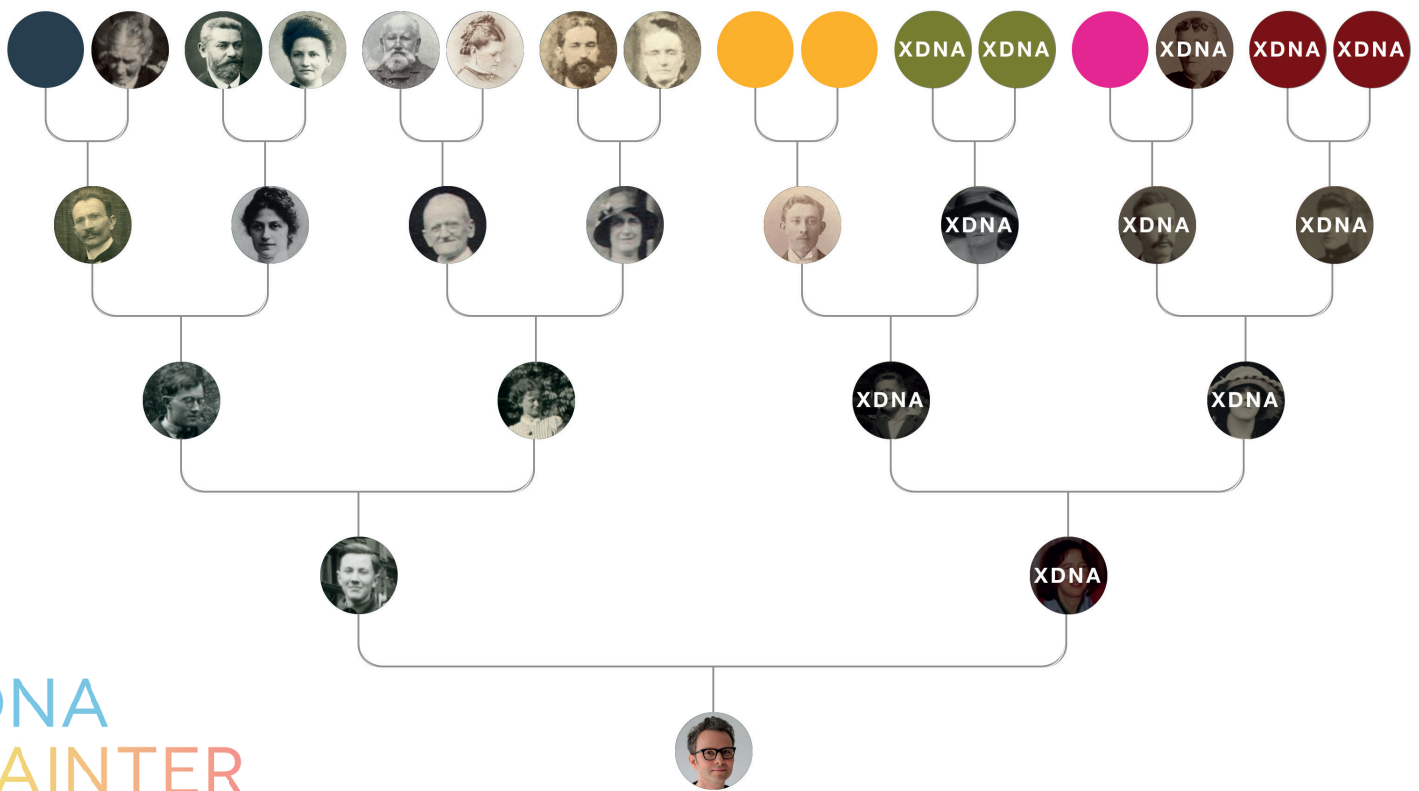
Chromosome mapping doesn't use your raw DNA file (the one with the A,C,T and G values in it). Instead, it uses the coordinates of each shared segment: chromosome number, start, and end position.

Here are some useful chromosome mapping webinars:

- **Chromosome mapping tips and techniques** <https://bit.ly/31gWj2R>
- **An introduction to DNA Painter** <https://bit.ly/31mgImZ>
- **DNA Painter: a chromosome browser and more** <https://bit.ly/31sOGpn>

To create a map, go to the DNA Painter homepage, click the 'Chromosome Maps' tab, and then click 'Create a new map'

CONTINUED →



DNA  
PAINTER

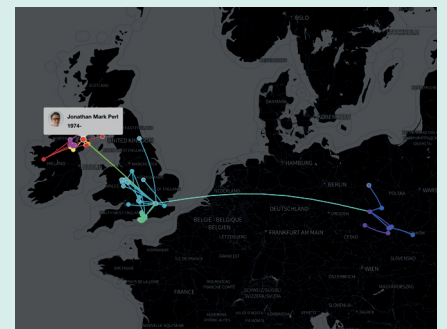
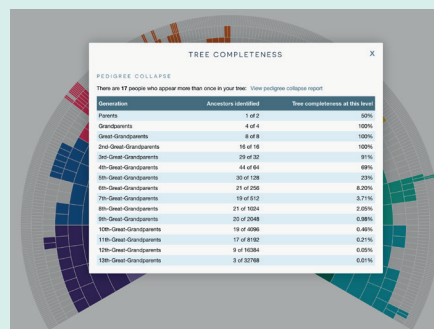
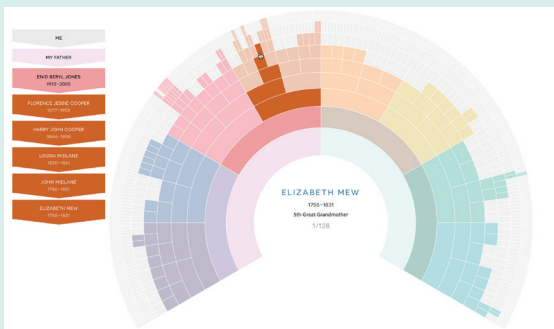
## ANCESTRAL TREES

At DNA Painter you can also make a simple ancestral tree/pedigree chart. This could be for yourself, to complement your chromosome map, or for anyone in your tree. You can make a tree manually, or by importing a GEDCOM file.

Once your tree is imported, you can access several useful customizations, including tree completeness and DNA inheritance paths. Here are some blog posts to help you get started:

- **Eight ways you can use ancestral trees at DNA Painter:** <https://bit.ly/3lwaLus>
- **DNA Painter Dimensions: a new way to showcase your ancestral line:** <https://bit.ly/2ZQGkHP>
- **Bringing Y, mt and mitoYDNA into DNA Painter trees:** <https://bit.ly/3oiDkgI>

To create an ancestral tree, go to the DNA Painter homepage and click the 'Ancestral Trees' tab and then click 'Create a new tree'



CONTINUED →

## What Are the Odds? *plus*

I am trying to identify the biological father of **Kenneth Barnett**, born in the year **1958**, using the DNA matches of Kenneth Barnett's grandchild **James Barnett**. The biological mother was born in 1940.

EDIT

☐ **New** Apply father's age to the probabilities?

☐ Also apply biological mother's age to the probabilities?

→ REGENERATE HYPOTHESES

→ REMOVE SUGGESTIONS

## WATO

What are the odds? (WATO) lets you use the amounts of DNA you share with multiple matches to help figure out where you might fit into their tree.

For example, if I share DNA with a large mystery group of matches, I might be able to use my research skills to figure out how they are all related to each other. If I can do this, I can use WATO to add the amounts of DNA I share with each person to the tree and see how I might fit into the tree based on these amounts. In 2024, a streamlined and more user-friendly version, WATO *plus* was released.

WATO RESOURCES:

- **Solving family mysteries with DNA and WATO plus:** <https://bit.ly/wato-plus>
- **'What are the Odds?' An online tool that can help solve DNA puzzles:** <https://bit.ly/3Dknbf0>

To create a WATO tree, go to <https://dnapainter.com/tools/probability/new>

To create a WATO plus tree, go to <https://dnapainter.com/tools/wato3/new>

## OTHER TOOLS AT DNA PAINTER

Beyond chromosome mapping and trees, you'll find additional tools at <https://dnapainter.com/tools>. Below are links to explanatory blog posts about these tools:

- **Shared cM project tool** – more info at <https://bit.ly/3DjzZm6>
- **Coverage estimator** – more info at <https://bit.ly/coverage-tool>
- **Inferred segment generator** – more info at <https://bit.ly/31htx24>
- **Distinct segment generator** – more info at <https://bit.ly/3lyzJJU>
- **Common segment generator** – more info at <https://bit.ly/3oiThn4>
- **cM estimator** – more info at <https://bit.ly/3rw9jfu>
- **Individual match filter** – tool at <https://bit.ly/3DiFYk>