



The Leeds Method

This was created by Dana Leeds in 2018. This method uses a spreadsheet to sort DNA matches into colour groups based on shared ancestors. It often creates four groups of DNA matches based on four grandparent lines, although there can be some additional groups if some lines are not entirely worked out.

This is how Dana Leeds explains her method.

“Step 1: List 2nd and 3rd cousins.

For this method, I use AncestryDNA and skip any “close family” and “first cousin” matches. Instead, I use cousins who Ancestry says are “second” or “third” cousins. However, I do eliminate any of the matches near the top who share over 400 cM. (In other words, use those matches who share between 90 and 400 cM of DNA with you.) The key is to not include anyone who you share two grandparents with. For the spreadsheet, I use Excel. I add “borders” around each cell – this helps everything stay readable when printed – and I “fill” the cells with colour to create the colour clusters.

	A	B	C	D	E
1	Person 01				
2	Person 02				
3	Person 03				
4	Person 04				
5	Person 05				
6	Person 06				
7	Person 07				
8	Person 08				
9	Person 09				
10	Person 10				
11	Person 11				
12	Person 12				
13	Person 13				
14	Person 14				
15	Person 15				

Step 2: Assign a colour to your first DNA match.

In this example, I assigned blue to person 01.

	A	B	C	D	E
1	Person 01	Blue			
2	Person 02				
3	Person 03				
4	Person 04				
5	Person 05				
6	Person 06				
7	Person 07				
8	Person 08				
9	Person 09				
10	Person 10				
11	Person 11				
12	Person 12				
13	Person 13				
14	Person 14				
15	Person 15				

Step 3: Open that person’s shared matches and assign them the same colour in the same column.

In this example, 01 showed shared matches with 02, 06, & 08. Each of these people are now a part of the Blue Cluster.

	A	B	C	D	E
1	Person 01	Blue			
2	Person 02	Blue			
3	Person 03				
4	Person 04				
5	Person 05				
6	Person 06	Blue			
7	Person 07				
8	Person 08	Blue			
9	Person 09				
10	Person 10				
11	Person 11				
12	Person 12				
13	Person 13				
14	Person 14				
15	Person 15				

Step 4: Locate the first person who does not have a colour assigned and assign them a colour in the next column.

In this example, person 03 is the first person who is not already a part of the Blue Cluster. So, they were assigned the colour Orange in the next column.

	A	B	C	D	E
1	Person 01				
2	Person 02	Blue			
3	Person 03		Orange		
4	Person 04				
5	Person 05				
6	Person 06	Blue			
7	Person 07				
8	Person 08	Blue			
9	Person 09				
10	Person 10				
11	Person 11				
12	Person 12				
13	Person 13				
14	Person 14				
15	Person 15				

Step 5: Open that person’s shared matches and assign each the same colour in the same column.

In this example, 03 showed shared matches with 09 and 11. Each of these people are now a part of the Orange Cluster.

Note: Even though it didn’t happen in this example, a person would be assigned as part of the Orange Cluster even if they were already a part of the Blue Cluster! When someone is part of more than one colour cluster, I call it *cluster overlap*.

	A	B	C	D	E
1	Person 01				
2	Person 02	Blue			
3	Person 03		Orange		
4	Person 04				
5	Person 05				
6	Person 06	Blue			
7	Person 07				
8	Person 08	Blue			
9	Person 09		Orange		
10	Person 10				
11	Person 11		Orange		
12	Person 12				
13	Person 13				
14	Person 14				
15	Person 15				

Step 6: Repeat steps 2 to 5 until all of your 2nd & 3rd cousins have at LEAST one colour assigned to them.

	A	B	C	D	E
1	Person 01	Blue			
2	Person 02	Blue			
3	Person 03		Orange		
4	Person 04			Yellow	
5	Person 05			Yellow	
6	Person 06	Blue			
7	Person 07			Yellow	
8	Person 08	Blue			
9	Person 09		Orange		
10	Person 10			Yellow	
11	Person 11		Orange		
12	Person 12			Yellow	
13	Person 13			Yellow	
14	Person 14				Purple
15	Person 15				

Analysing the Results

4 Columns, No Overlap:

If your results show 4 distinct colour clusters, like above, without any overlap, your sort is *likely* showing matches to your four sets of great grandparents.

Fewer than 4 Columns, No Overlap:

If your results show less than 4 clusters, it is likely these clusters represent 3 of your 4 sets of great grandparents and that you have no matches at the 2nd/3rd cousin levels who have tested for the 4th set of great grandparents.

	A	B	C	D
1	Person 01	Blue		
2	Person 02		Orange	
3	Person 03		Orange	
4	Person 04			Yellow
5	Person 05			Yellow
6	Person 06			Yellow
7	Person 07		Orange	
8	Person 08	Blue		
9	Person 09			Yellow
10	Person 10			Yellow
11	Person 11			Yellow
12	Person 12			Yellow
13	Person 13		Orange	
14	Person 14			Yellow
15	Person 15		Orange	
16	Person 16			Yellow

Some Overlap:

If your results show 4 clusters but some of your matches have been assigned more than one colour (for example, 02 and 04 are both blue and orange), your sort is likely showing either your four sets of great grandparents, but also showing you that two of these results (i.e. blue & orange) are on one side of your family. Or, the overlapped clusters (blue & orange) might belong to one set of great grandparents and, in this example, you are missing matches for one set of your four sets of great grandparents.

	A	B	C	D	E
1	Person 01	Blue			
2	Person 02	Blue	Orange		
3	Person 03		Orange		
4	Person 04	Blue	Orange		
5	Person 05			Yellow	
6	Person 06			Yellow	
7	Person 07		Orange		
8	Person 08			Yellow	
9	Person 09				Purple
10	Person 10		Orange		
11	Person 11			Yellow	
12	Person 12				Purple
13	Person 13	Blue			

Lots of Overlap:

In the example on the next page, there is a lot of overlap between all of the clusters, except the yellow and brick red clusters. All of the overlapping clusters are on the maternal side of this test taker and visually show a lot of cousins marrying cousins resulting in pedigree collapse. The paternal mother's side is represented by both the yellow and brick red clusters. The paternal father's side has no cousins matching at the 2nd/3rd cousin levels. So, even though there are a lot of clusters and matches, this sort represents only 3 of the four sets of great grandparents for this individual.

	B	C	D	E	F	G	H	I	J	K
1	Blue									
2	Blue	Orange		Purple				Red	Green	
3	Blue	Orange								
4	Blue			Purple				Red		Blue
5			Yellow							
6	Blue	Orange			Green			Red		
7			Yellow							
8	Blue	Orange		Purple						
9										
10					Green					
11						Red				
12			Yellow							
13	Blue	Orange						Red	Green	Blue
14			Yellow							
15	Blue			Purple	Green		Cyan			Blue
16	Blue				Green					
17	Blue			Purple	Green					Blue
18	Blue			Purple	Green		Cyan			Blue
19	Blue									
20	Blue			Purple	Green		Cyan			Blue
21										
22	Blue			Purple						
23		Orange						Red		
24			Yellow							
25	Blue									Blue
26	Blue									
27							Cyan			
28	Blue				Green				Green	
29	Blue									
30				Purple						
31								Red		

NOTES:

- Your results may vary!
- Colour Clustering, as with most DNA results, is not proof of a specific relationship. Instead, it is a **clue** that can be helpful in determining relationships.
- Although all the results shown in this post are real, the names have been hidden for privacy reasons.
- *A special thank you to everyone who allowed me to access their DNA results and gave me feedback! And, a special thank you to John Motzi who provided a lot of feedback!"*

The link below will take you to Dana Leeds' blog where there is a great deal more information about the Leeds method.

<https://www.danaleeds.com/the-leeds-method/>

Family Fanatics have a video explaining how they use the method:

<https://youtu.be/-74Ljyqo9c>