How to Interpret Gedmatch

International Child Search Alliance

Gedmatch is not as user friendly as 23andMe. Matches look like this:

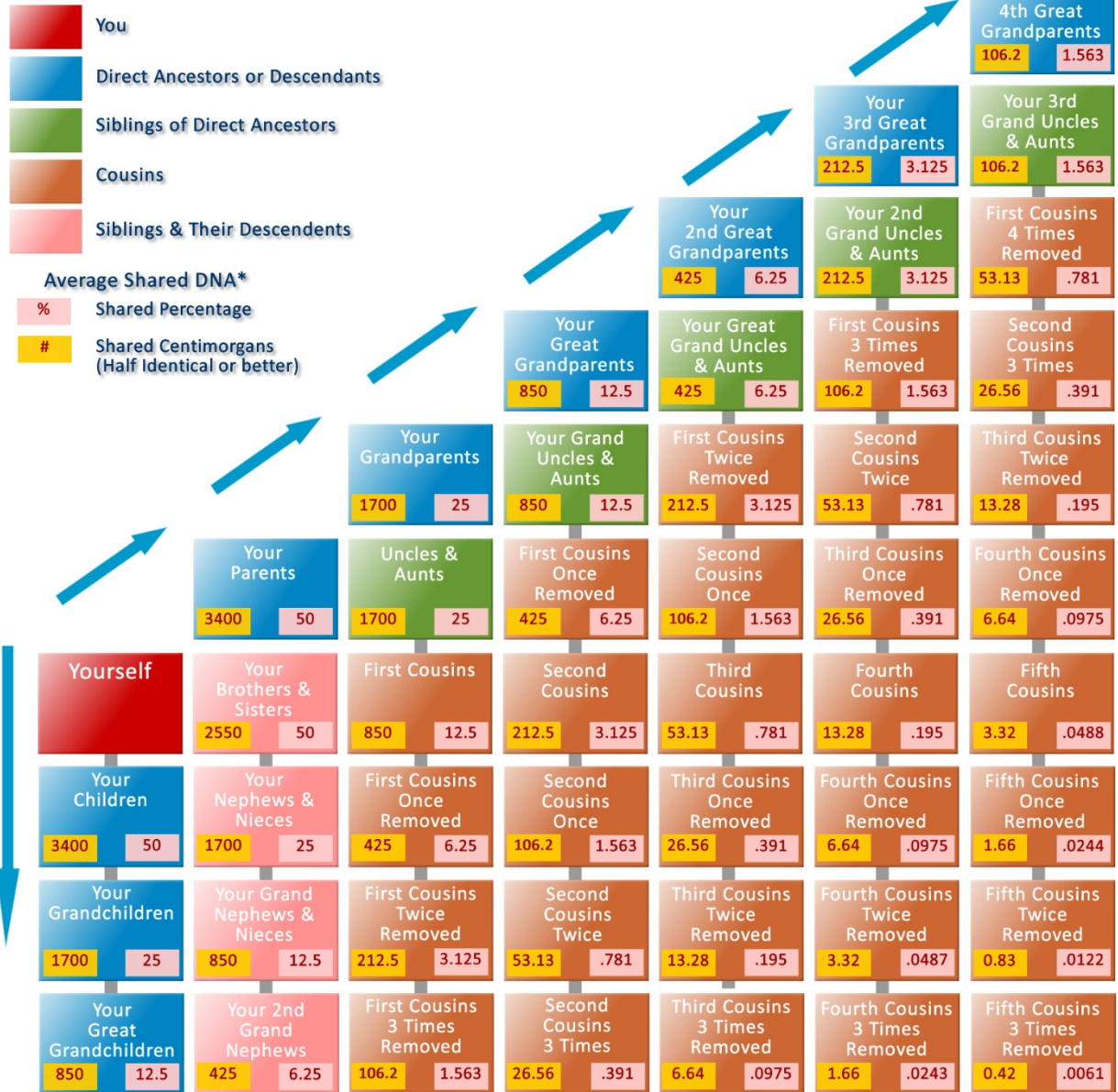| Kit	1:1	Name	Email	Largest Seg	Total cM	Gen	Overlap	Date Compared	Testing Company
Z989214	A	gurgu		12.3	46.2	4.1	52403	2018-12-08	Migration - F2 - Z
Z518631	A	*xoxosmile		12.0	40.3	4.2	52335	2018-12-12	Migration - F2 - Z
Z537916	A	*Anita		10.7	38.4	4.3	51589	2018-12-11	Migration - F2 - Z
Z568705	A	hooper		11.1	37.9	4.3	48997	2018-12-03	Migration - F2 - Z
Z236306	A	hls		11.1	37.6	4.3	52234	2018-12-10	Migration - F2 - Z
Z633340	A	*sc		12.9	30.5	4.4	52964	2018-12-07	Migration - F2 - Z
EX1257725	A	*YZ		11.8	29.3	4.5	76985	2019-08-04	GeseDNA
Z441220	A	Wang Zhen yu		12.3	28.8	4.5	52423	2018-12-16	Migration - F2 - Z
EE6702896	A	Tiantian Cai		9.9	32.3	4.5	77384	2019-03-10	gesedna

This manual is helpful: whoareyoumadeof.com/blog/2018/01/17/how-to-understand-the-gedmatch-genesis-one-to-many-comparison/

The most important column is the Gen column – 2 and lower are most significant.

From:
gengenaus.com/2017/03/25/gedmatch-generations/

I had a look at the known connections I have with my genetic cousins who've uploaded to Gedmatch and this is the range of how Gedmatch calculated the generation distance to the most recent common ancestors and then I give the actual relationships. As you can see, the further distant the common ancestor, the more varied are the possible relationships.

Gen 1
Well, that's easy – it's always going to be a parent-child relationship

Gen 1.2
Oddly, this is always a **sibling** relationship

Gen 1.4
Half-sibling
Uncle ~ niece
Grandparent

Gen 1.5
Uncle ~ niece
This makes sense: the common ancestors for my uncle are his parents, which is 1 generation, but for me, his niece, it is my grandparents, 2 generations. Therefore, the Gedmatch Generation is calculated as being between 1 and 2 = 1.5

Gen 1.6
Uncle/aunt ~ niece/nephew
Grandparent

Gen 1.9
1C (first cousins), whose common ancestors are their grandparents, which is 2 generations

Gen 2.2
1C (first cousins)
1C1R (first cousins once removed)

Gen 2.3
1C1R (first cousins once removed)

Gen 2.5
1C1R (first cousins once removed)
Again, this makes sense: my cousin is a generation older than me, his grandparents, which is 2 generations, are my great-grandparents, which is 3 generations. Therefore, the Gedmatch Generation is calculated as being between 2 and 3 = 2.5 Gen 2.9
2C (second cousins)

Gen 2.6
1C1R (first cousins once removed)
2C (second cousins)

Gen 3.0
2C (second cousins)
This is the ideal scenario, with the common shared ancestors for me and my match both being 3 generations back.

Gen 3.3
2C1R (second cousins once removed)

Gen 3.5
2C1R (second cousins once removed)
Again, this makes sense: my second cousin is a generation older than me, her G-grandparents, which is 3 generations, are my GG-grandparents, which is 4 generations. Therefore, the Gedmatch Generation is calculated as being between 3 and 4 = 3.5
3C *(third cousins)*
2C2R (second cousins twice removed)
Here we have a case of our common ancestors being my G-grandparents, 3 generations, but these ancestors are my matches GGG-grandparents, 5 generations: a difference of two generations between me and my match

Gen 3.6
2C1R (second cousins once removed)
3C (third cousins)

Gen 3.7
2C1R (second cousins once removed)
3C (third cousins)
3C1R (third cousins once removed)

Gen 3.8
2C2R (second cousins twice removed)
3C (third cousins)

Gen 3.9
3C1R (third cousins once removed)

国际儿童寻亲联盟

Consanguinity Relationship Chart

Legend:
- **You** (red)
- **Direct Ancestors or Descendants** (blue)
- **Siblings of Direct Ancestors** (green)
- **Cousins** (brown)
- **Siblings & Their Descendents** (pink)

Average Shared DNA*
- **%** Shared Percentage
- **#** Shared Centimorgans (Half Identical or better)

						Your 4th Great Grandparents — 106.2 / 1.563
					Your 3rd Great Grandparents — 212.5 / 3.125	Your 3rd Grand Uncles & Aunts — 106.2 / 1.563
				Your 2nd Great Grandparents — 425 / 6.25	Your 2nd Grand Uncles & Aunts — 212.5 / 3.125	First Cousins 4 Times Removed — 53.13 / .781
			Your Great Grandparents — 850 / 12.5	Your Great Grand Uncles & Aunts — 425 / 6.25	First Cousins 3 Times Removed — 106.2 / 1.563	Second Cousins 3 Times — 26.56 / .391
		Your Grandparents — 1700 / 25	Your Grand Uncles & Aunts — 850 / 12.5	First Cousins Twice Removed — 212.5 / 3.125	Second Cousins Twice — 53.13 / .781	Third Cousins Twice Removed — 13.28 / .195
	Your Parents — 3400 / 50	Uncles & Aunts — 1700 / 25	First Cousins Once Removed — 425 / 6.25	Second Cousins Once — 106.2 / 1.563	Third Cousins Once Removed — 26.56 / .391	Fourth Cousins Once Removed — 6.64 / .0975
Yourself	Your Brothers & Sisters — 2550 / 50	First Cousins — 850 / 12.5	Second Cousins — 212.5 / 3.125	Third Cousins — 53.13 / .781	Fourth Cousins — 13.28 / .195	Fifth Cousins — 3.32 / .0488
Your Children — 3400 / 50	Your Nephews & Nieces — 1700 / 25	First Cousins Once Removed — 425 / 6.25	Second Cousins Once — 106.2 / 1.563	Third Cousins Once Removed — 26.56 / .391	Fourth Cousins Once Removed — 6.64 / .0975	Fifth Cousins Once Removed — 1.66 / .0244
Your Grandchildren — 1700 / 25	Your Grand Nephews & Nieces — 850 / 12.5	First Cousins Twice Removed — 212.5 / 3.125	Second Cousins Twice — 53.13 / .781	Third Cousins Twice Removed — 13.28 / .195	Fourth Cousins Twice Removed — 3.32 / .0487	Fifth Cousins Twice Removed — 0.83 / .0122
Your Great Grandchildren — 850 / 12.5	Your 2nd Grand Nephews — 425 / 6.25	First Cousins 3 Times Removed — 106.2 / 1.563	Second Cousins 3 Times — 26.56 / .391	Third Cousins 3 Times Removed — 6.64 / .0975	Fourth Cousins 3 Times Removed — 1.66 / .0243	Fifth Cousins 3 Times Removed — 0.42 / .0061

In the past there were a few false positive matches on Gedmatch with a 23mofang or GeseDNA account – not sure if this is still the case but if you match, be aware of it. Good luck!