## Who's More/Less Alike?







## Genotype and Phenotype: What You Get Isn't Always What You See

neck: What is the difference between <b>genotype</b> and <b>phenotype</b> ?	

Did you use *genotype* or *phenotype* to draw a conclusion and make an assertion about alikeness, or differentness?

What do people *generally* use to determine skin color?

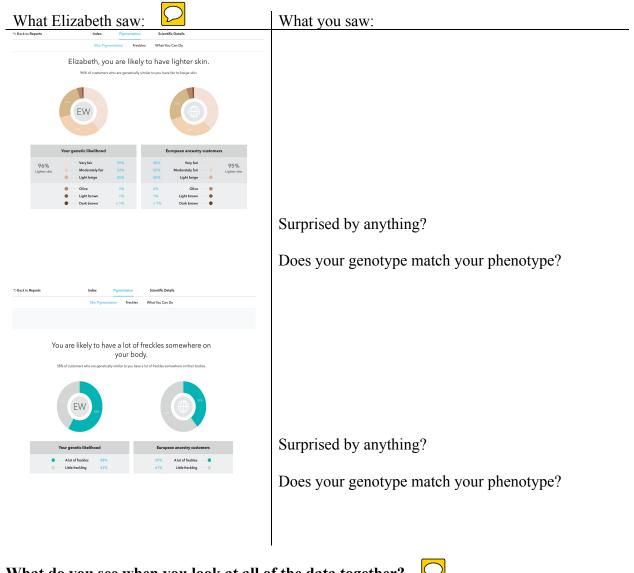
What actually determines skin color?

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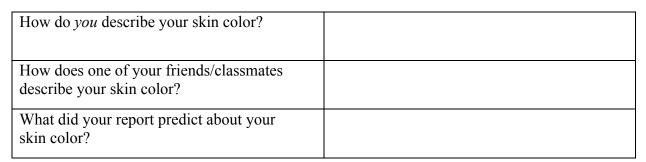
## Let's take another look at your report for traits:

You should be able to find them under the categories of  $\rightarrow$  Skin  $\rightarrow$  Pigmentation  $\rightarrow$  Freckles

Note: sometimes freckles are hard to see on dark-skinned individuals, but give it a try!



## What do you see when you look at all of the data together?



**Skin color and geographic placement** (someone pass the sunscreen, vitamin D, and folate)

"Quick Check: What do you know about skin color and where people live on the Earth?

How has skin color evolved over time?

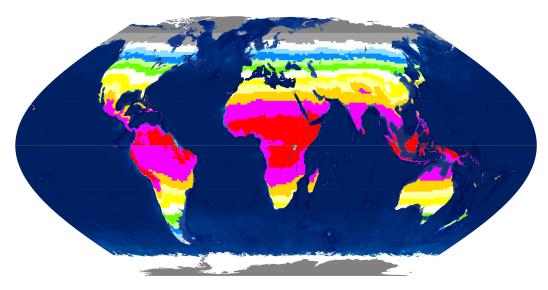
★ What does "evolve" mean?

Take a guess: do you think geography (where you live) plays a role in the evolution of skin color?



This image represents the distribution of skin color across the globe.

What do you notice?



This image represents the distribution of UV-B radiation across the globe.

What do you notice?

Think About It: What's the connection between these two images?	$\triangleright$