**Who’s More/Less Alike?**

|  |  |
| --- | --- |
|  |  |

**Genotype and Phenotype: What You Get Isn’t Always What You See**

|  |
| --- |
| 🖑 Quick Check: What is the difference between **genotype** and **phenotype**? |

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?

|  |
| --- |
| Notes: |

**Let’s take another look at your report for traits:**

You should be able to find them under the categories of Skin 🡪 Pigmentation 🡪 Freckles

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

|  |  |
| --- | --- |
| What Elizabeth saw: | What you saw: |
|  | Surprised by anything?  Does your genotype match your phenotype? |
|  | Surprised by anything?  Does your genotype match your phenotype? |

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

|  |  |
| --- | --- |
| How do *you* describe your skin color? |  |
| How does one of your friends/classmates describe your skin color? |  |
| What did your report predict about your  skin color? |  |

**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? |