

## **Thank you!**

Thank you for downloading this resource. I work hard to create high-quality content for my students. If you have any questions, concerns, or if you find any typos or issues that need to be addressed, please email me at [sciencegeek@kristinmoonscience.com](mailto:sciencegeek@kristinmoonscience.com)

## **Terms of Use/Copyright Policy**

- This resource was created by Kristin Moon of Kristin Moon Science, Copyright © 2018-present. All rights reserved by author.
- The content contained within this resource is for use by you and your immediate family.
- You are not permitted to make copies of any of the resources for anyone outside of your immediate family/household.
- You may not digitally distribute any of the original content within this resource.

Failure to comply with these terms of use is a copyright infringement and a violation of the Digital Millennium Copyright Act. The content within this resource is copyrighted and cannot be distributed, posted, extracted, shared electronically, digitally, or otherwise without permission or license by the author, Kristin Moon (Kristin Moon Science).

## Dominant and Recessive Traits



### **1) Tongue Rolling**

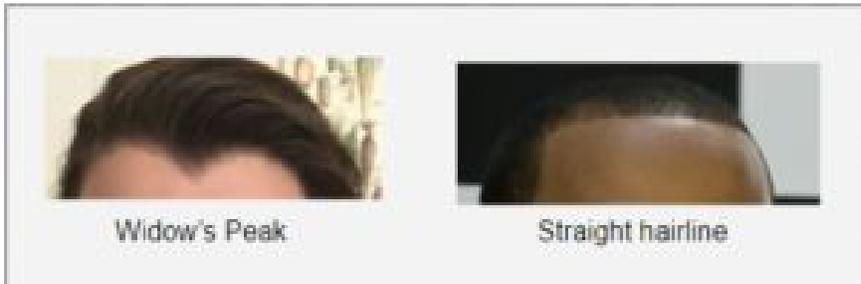
Being able to roll your tongue seems straightforward. Can't everyone do it? You may be surprised to find that the answer is no. Whether or not you can roll your tongue is a trait controlled by your genes. The ability to roll your tongue is a dominant trait. What trait do you have? Do you have the dominant roller trait or the recessive non-roller trait? \_\_\_\_\_

### **2) Free or Attached Earlobes**

Another easily observable trait relates to how your earlobes are attached to your head. If your earlobes attach directly to your head you have what is called attached earlobes. If there is a gap between your earlobes and your head, you have unattached or free earlobes. The presence of free earlobes is a dominant trait while having attached earlobes is a recessive trait. Which type of earlobes do you have? Free earlobes (dominant) or attached earlobes (recessive)? \_\_\_\_\_



### 3) Widow's Peak

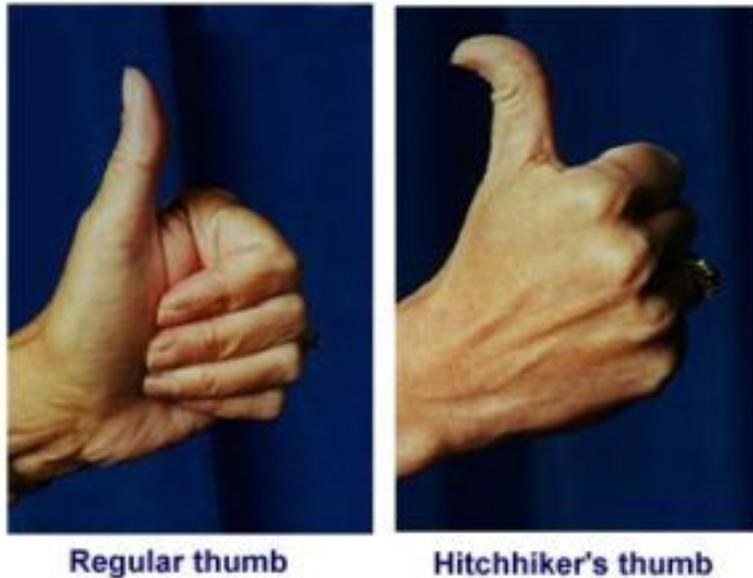


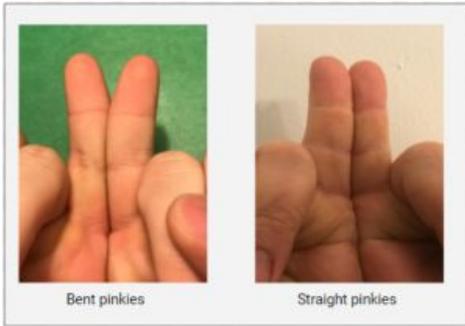
Even the shape of your hairline is determined by your genes. If your hairline comes to a point at the center of your forehead, you have what is known as a widow's peak. The presence of a widow's peak is a

dominant trait, while a straight hairline is a recessive trait. What type of hairline do you have, the dominant widow's peak trait or the recessive straight hairline trait? \_\_\_\_\_

### 4) Hitchhiker's Thumb

A strangely-named but easily determined trait is known as the hitchhiker's thumb. Observe your thumb as you give the "thumbs up" sign. If your thumb naturally bends back, you have hitchhiker's thumb---a dominant trait. If your thumb stays straight, you have the recessive trait. Which type of thumb do you have: the dominant hitchhiker's thumb or the recessive straight thumb?  
\_\_\_\_\_





### 5) Bent Pinkie

Place your hands in front of you, palms up, with your two pinkies touching side to side. If the tips of your pinkies bend away from each other, you have bent pinkies, the dominant trait. If they don't bend away from each other, you have straight pinkies, the recessive trait.

Which type of pinkies do you have, bent or straight?

---



### 6) Hand Clasp

Without thinking, clasp your hands in front of you. Now look at your clasped hands. Which thumb is on top, your right thumb or your left? Believe it or not, even this is determined by your genes! Clasping your hands with the left thumb on top is the dominant trait. However, if your right thumb was on top when you clasped your hands, you have the recessive trait. Which trait do you have, the dominant or the recessive?

---



Cleft Chin



Smooth Chin

### Cleft Chin

Another observable genetic trait is the presence or absence of a cleft chin which appears as a small indentation. The cleft chin allele is dominant while a smooth chin is recessive. Which type of chin do you have? \_\_\_\_\_



### Morton's Toe

I don't know who Morton was, but he's got a strange trait named after him. If your "big" toe is shorter than your second toe, you have what is known as Morton's toe, a dominant trait. If your second toe is shorter than your "big" toe, you have the recessive trait. What about you? Do you have Morton's toe or not?

\_\_\_\_\_



### **10) Dimples**

Another easily identifiable trait is the presence or absence of dimples. Dimples are typically seen when a person is smiling or laughing and usually occur around the mouth and cheeks. The presence of dimples is a dominant trait while lacking dimples is the recessive trait. Do you have dimples or not?

---

What did you learn from this activity? Did you have more dominant or recessive traits? Were you surprised by any of your results?

To extend this activity even further, get your parents, siblings, and grandparents to complete the same genetic trait survey. In doing so, you may discover patterns in the inheritance of traits within your immediate family.

*If you'd like to learn more about DNA, including how it is expressed within cells, you may be interested in my course [DNA Basics, Gene Expression, and DNA Mutations](#). To learn more about genetic traits and patterns of inheritance, check out my course [Genetics and Heredity](#). Both courses can be found on my website, [Kristinmoonscience.com](http://Kristinmoonscience.com).*