

UNIQUE YOU

Human beings are all similar, but no two people are exactly alike. Check the things that make you unique and how your traits come from your parents.

MATERIALS: Paper; pencil.

DOING IT:

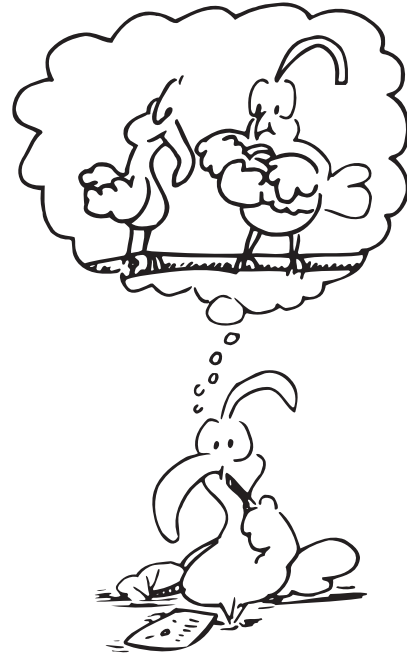
1. Make a list of the traits you have from the following group (a "D" indicates a dominant trait, while "R" is a recessive trait):

- Hair -- dark (D) vs. light (R)
- Eyes -- dark or hazel, green (D) vs. blue or gray (R)
- Eye Lashes -- long, 9 mm or more (D) vs. short (R)
- Nose -- turned-up (D) vs. turned-down (R)
- Dimples -- yes (D) vs. no (R)
- Ear Lobes -- free (D) vs. attached (R)
- Hair on Middle Joints of Fingers -- yes (D) vs. no (R)
- Freckles -- yes (D) vs. no (R)

2. Put an "F" beside a trait you share with your father and an "M" beside a trait you share with your mother. Do you get more traits from your mother or your father? Which traits are shared by both parents?

3. Compare your list to other people's. How many people have each trait? Which traits are most common? Are recessive traits less frequent than dominant traits?

4. *Some Special Traits:* Can you roll your tongue into a lengthwise tube? (One study found that people who can roll their tongue are more likely to study science!) Can you bend the tip of your tongue back sharply without touching your teeth? Can you spread your toes and wiggle your little toe sideways without moving any of the other toes? Can you bend the top joint of one of your fingers without bending the other joint? Can you bend your thumb as far backward as you can forward? Can you form your two middle fingers into a "V" shape?



How you look is determined by instructions in your body provided from your mother and father. These instructions are carried on "genes". Thousands of genes are needed to produce the intricate recipe resulting in a single person. All human beings are similar, but there are also many variations in the basic human plan. Some variations are internal, like blood type. Others are as plain as the nose on your face or the colour of your eyes. A person inherits one gene for a certain trait from his or her mother, and another gene for the trait from his or her father. Some traits are "dominant" while others are "recessive". For example, if a person inherits a gene for attached ear lobes from one parent and a gene for free ear lobes from the other, chances are he or she will have free ear lobes because free ear lobes are dominant. It's not always possible to determine whether a person carries two dominant genes for a particular trait or one dominant and one recessive gene (in either case, the person would exhibit the dominant characteristic). This is why it's helpful to look at parents and grandparents to trace back dominant and recessive traits.

Topics: Human Body; Classification.

