



Challenge: DO YOU HAVE GRANDMA'S EYES?

The Scoop: Most of who we are and what we look like comes from our DNA, or *genetic* information that is stored inside each cell in our body. We all get $\frac{1}{2}$ of our genetic information from our mothers and $\frac{1}{2}$ from our fathers. Some genetic traits are impossible to see just by looking; your blood type is one example. But many genetic traits are easy to see with the naked eye, and in this challenge you'll observe physical genetic traits and decide which ones are the most common.

What You Need:

- Paper, and a pen or pencil.

The Challenge: Observe the people around you - your friends, your family, even your neighbors – and write down the number of people you see and what traits each person has:

1. Hair color (blond, brown, black, red)
2. Hair texture (curly, wavy, or straight)
3. Eye color (green, blue, gray, brown, light brown)
4. Dimples
5. Cleft chin
6. Freckles
7. Hair on the knuckles

Stuff to Think About:

- What were the most and least common traits you observed for each? Can you guess why this might be?
- When you looked at people in the same family, are certain traits more or less alike?
- Why do you think there are so many different types of each trait?
- Often times a person has a trait that is very different from his or her parents' traits. Why do you think that is?