COMMON MISCONCEPTIONS

• Babies get traits from only their moms.
Babies get traits from both their mother and their father. Some babies look more like their mother and some look more like their father. When looking closely it is most common to have traits from both parents. Which traits you get is often a matter of random chance, though for reasons far above this grade level, some traits can occur more frequently than others.

• Baby animals all look the same.
People are very good at noticing traits in other people. The smallest differences in our bone structure, eye color and hair color are very obvious to us. However, students may think that baby animals are exactly alike. It may appear that way from a distance, but if you look closely, you can see many traits that are different, just like humans.

• Things that you eat can influence traits.
Foods can not affect traits such as hair color or eye color. For example, curly hair comes from one or both of your parents. There are traits that are influenced by the environment, for example a plant grown with little water will look different from a plant grown in optimal conditions. At this grade level, traits that are 100% from parents and traits influenced by the environment are not differentiated. The focus is on understanding what a trait is and that all living things have traits.

HEREDITY AND TRAITS

Students are always interested to understand why they look the way that they do. At an early age, just simply understanding that specific traits are passed down from parents is enough. They will notice that some traits came from their mom, while others came from their dad. As they progress through school, they will learn about traits influenced by the environment, and then that some traits are dominant or recessive.

TIPS FOR TEACHERS

Discussing traits can be a sensitive topic for students who are adopted or students that do not have both parents in their lives. Being sensitive to these students by keeping the topic general when talking about humans and focused on different animals can help them feel more comfortable.