

Name _____

Date _____



Genetic Traits

Have you ever been told you look like your parents? Parents pass genes that determine physical features to their children. These physical features are called genetic traits. Children receive half of their genes from each parent. The genes of one parent may be dominant over the genes of the other parent. A child usually looks most like the parent who supplies the most dominant genes.

Strategy

You will examine some of your genetic traits.

You will examine your parents for the same genetic traits.

You will compare how similar or different you and your parents are.

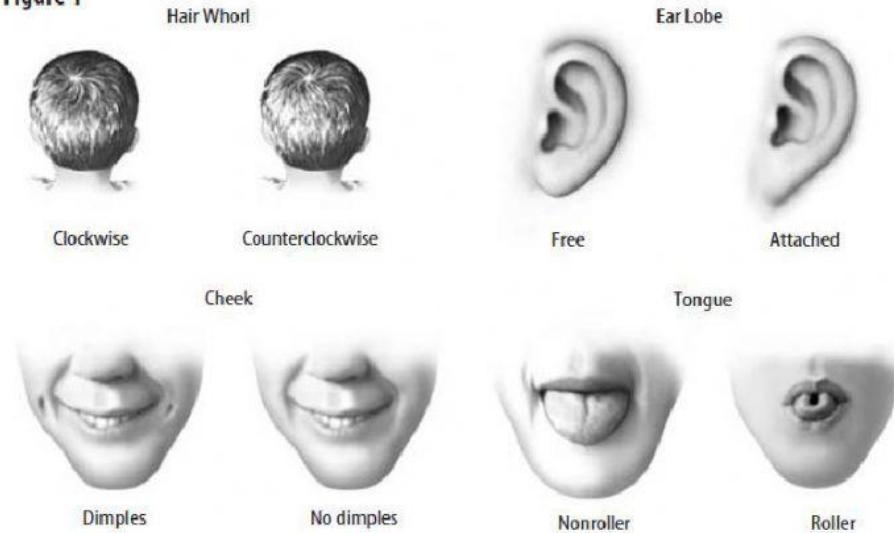
Materials

pencil

Procedure

1. Work with a partner during this activity. Complete the column marked "You" in Table 1 in Data and Observations for each of the genetic traits listed. Ask your partner to help you describe the traits you cannot see. Refer to Figure 1 for an explanation of traits you may not be familiar with.
2. Optional: Take the table home and complete it for each of your parents.

Figure 1



Laboratory Activity 1 (continued)

Data and Observations

Record your results in the table.

Table 1

Trait	Description	You	Father	Mother
Handedness	Left or right			
Sight	Nearsighted or normal			
Eye color	Blue or not blue			
Dimples*	Yes or no			
Freckles	Present or absent			
Hair whorl*	Clockwise or counterclockwise			
Earlobe*	Free or attached			
Tongue*	Roller or nonroller			

* See Figure 1.

Questions and Conclusions

1. How many traits do you and your mother share?

You and your father?

2. How many traits do you share with both parents?

3. List all traits that you show but are not shown by either parent.

4. How might it be possible to show a trait when both parents do not show it?

5. What proof do you have that all of your genes did not come from only one parent?

Strategy Check

_____ Can you identify some genetic traits?

_____ Can you count how many traits are the same for each parent and you?

_____ Can you make any conclusions about the traits you received from each parent?