

## Genetics with a Smile Wrapping It Up!

Name \_\_\_\_\_

(1) How does your smiley face compare to the ones created by your classmates? Pick two smiley faces that are displayed near your smiley face and compare each of the 12 traits. Indicate the phenotype for each smiley face for each trait in the chart.

Trait	My Smiley Face	Smiley by _____	Smiley by _____
Face Shape			
Eye Shape			
Hair Style			
Smile			
Ear Style			
Nose Style			
Face Color			
Eye Color			
Hair Length			
Freckles			
Nose Color			
Ear Color			

(2) Which smiley face has the most dominant traits? \_\_\_\_\_ How many? \_\_\_\_\_ traits

(3) Which smiley face has the most recessive traits? \_\_\_\_\_ How many? \_\_\_\_\_ traits

(4) Which traits were a result of incomplete dominance?

(5) What is the probability that a smiley face will have a green face? \_\_\_\_\_ out of \_\_\_\_\_ or \_\_\_\_\_ %

(6) How many smiley faces have a green face, which is a recessive trait? \_\_\_\_\_ out of \_\_\_\_\_ or \_\_\_\_\_ %

(7) How does your predicted probability for a green face (#5) compare to the actual results (#6)? Explain.

(8) What is the probability that a smiley face will have an orange nose? \_\_\_\_\_ out of \_\_\_\_\_ or \_\_\_\_\_ %

(9) How many smiley faces have an orange nose? \_\_\_\_\_ out of \_\_\_\_\_ or \_\_\_\_\_ %

(10) How does your predicted probability for an orange nose (#8) compare to the actual results (#9)? Explain.