



Cookie Genetics: An Edible Review

Remember science class, when you learned about dominant and recessive genes and identifying genotypes? This is a review activity to help you recall that genetic process in a sweet way!

Part I

Each of you will receive a plain sugar cookie and have phenotype options available to you as to the toppings which include:

White Icing (W) is dominant

Chocolate Icing (w) is recessive

Colored Sugar (C) is dominant

White Sugar (c) is recessive

No Sprinkles (N) is dominant

Sprinkles (n) is recessive

NOTE: You may only choose one from each category; not both.

Write down your phenotype selections: _____

Write down the genotype of your cookie (3 letters): _____

Part II

You will receive a card of one half of a famous couple. You will need to circulate and find the mate of the famous couple. Once you are a couple again, record the phenotype and genotype of your mate.

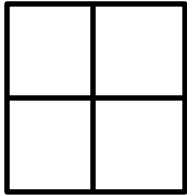
Write down your mate's phenotype selections: _____

Write down the genotype of your mate's cookie (3 letters): _____

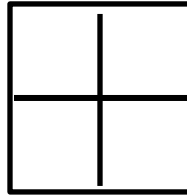
Part III

If you and your mate were to produce a "little cookie" what would it look like? Figure out the genotypes in the Punnett Squares and then create an illustration of your new "little bundle of sweetness" in the box below and label the genetic characteristics for icing, sugar and sprinkles.

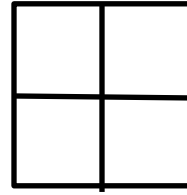
Trait #1



Trait #2



Trait #3



After turning this paper in, you may now eat your cookie, but please clean any crumbs or messes that remain.

