

# Create your own GNA sequence

## Materials:

1. 2 strings of Twizzlers candy
2. Pink, White, Yellow and Green mini marshmallows
3. Toothpicks

## Instructions:

Imagine the 2 strings of Twizzlers represent the backbones of the DNA (the sides of the DNA ladder). Let the following colors of marshmallows represent the following nucleotides:

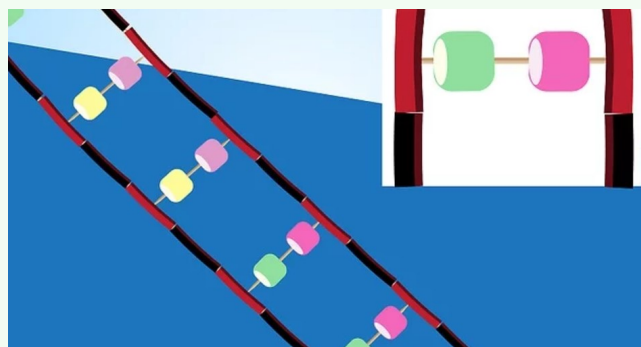
- ⇒ Pink marshmallow - A nucleotide
- ⇒ Yellow marshmallow - T nucleotide
- ⇒ White marshmallow—G nucleotide
- ⇒ Green marshmallow— C nucleotide



1. Take a toothpick and stick one marshmallow at each end of the toothpick, make sure that the two marshmallows can pair up. Then repeat for 7-12 toothpicks.



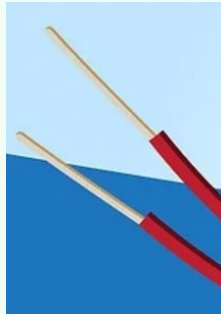
2. Now stick one end of the toothpick onto one of the Twizzlers strings and the other end onto the other string. Make sure that the toothpick positions are equal distance away from the end of the string on the both sides.
3. Repeat for each of the toothpicks, and then slightly twist your gene sequence.
4. Congrats! You have successfully created your own DNA sequence



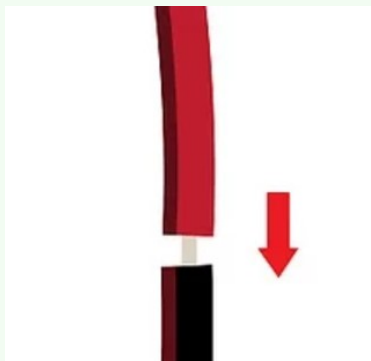
# Genetic Engineering of a plant

Now you are going to engineer a plant, which would have 2 distinct characteristics. To do so you would combine your own genetic sequence with the genetic sequence of another group.

1. Take two toothpicks and stick them at the end of each Twizzler candy



2. Find a pair that designed a gene which codes for a different characteristic
3. Join the two genes by sticking the one end of your gene to the end of another gene (refer to the picture below).



4. Name the 2 characteristics that your plant would possess

Note: I took all the pictures from WikiHow and it would be good to replace them with our own pictures of the same things.

Also need to format colors/fonts, add team logo and any other decorations you might deem necessary