

How To Make a DNA Model Using Candy

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Making DNA models can be informative, fun, and in this case tasty. Here you will learn how to construct a DNA model using candy. But first, what is DNA? DNA is a [nucleic acid](#) that contains the genetic information for the reproduction of life. Its shape is that of a double helix and its appearance is somewhat of a twisted ladder or spiral staircase. DNA is composed of nitrogenous bases (adenine, cytosine, guanine and thymine), a five-carbon sugar (deoxyribose), and a phosphate molecule.

Difficulty: Easy

Time Required: 20 minutes

Here's How:

1. Gather together red and black licorice sticks, colored marshmallows or gummy bears, toothpicks, needle, string, and scissors.
2. Assign names to the colored marshmallows or gummy bears to represent nucleotide bases. There should be four different colors each representing either adenine, cytosine, guanine or thymine.
3. Assign names to the colored licorice pieces with one color representing the pentose sugar molecule and the other representing the phosphate molecule.
4. Use the scissors to cut the licorice into 1 inch pieces.
5. Using the needle, string half of the licorice pieces together lengthwise alternating between the black and red pieces.
6. Repeat the procedure for the remaining licorice pieces to create a total of two stands of equal length.
7. Connect two different colored marshmallows or gummy bears together using the toothpicks.
8. Connect the toothpicks with the candy to either the red licorice segments only or the black licorice segments only, so that the candy pieces are between the two strands.
9. Holding the ends of the licorice sticks, twist the structure slightly.

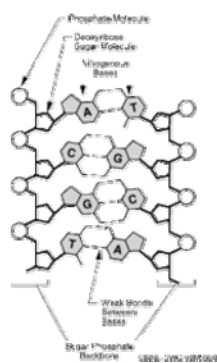
Tips:

1. When connecting the base pairs be sure to connect the ones that pair naturally in DNA. For example, adenine pairs with thymine and cytosine pairs with guanine.
2. When connecting the candy base pairs to the licorice, the base pairs should be connected to the licorice pieces that represent the pentose sugar molecules.

What You Need

- Red and black licorice sticks
- Colored marshmallows or gummy bears
- Toothpicks
- Needle
- String
- Scissors

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