Extra Credit Assignment: DNA Model Building

Your assignment is to create a three-dimensional model of a DNA double helix.

The model must meet the following criteria:

* Must represent the double helix structure (make sure it’s right-handed)
* May be made of any materials you choose (as long as they are not stolen, perishable (no Jell-O or fruit), or otherwise dangerous).
* Some possible materials that could be used:
* Styrofoam balls
* Beads
* Uncooked pasta
* Toothpicks
* Wire
* Pipe cleaners
* Anything else you can think of (be creative)!

The sugar-phosphate backbone must be represented.

All four nitrogenous bases must be represented and bonded to each other and to the backbone correctly.

The model must be at least 9 base pairs long or 12 inches in length, whichever in longer (i.e. if your model has 9 base pairs, but is only 4 inches long, you need to make it longer. If it is 6 base pairs and 12 inches long, you need at least three more base pairs).

An identification key must accompany the model which includes your name and shows what each of the structures represent.

You may not use a pre-made DNA kit!

All models must vertically supported on some sort of stand or in some other way (must be relatively sturdy).

