1. Write the name of your assigned DNA base. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Build a model of your assigned DNA base.



1. A & T can pair together and G & C can pair together. Find a group that can pair with your base. Arrange your models to show how they fit together via hydrogen bonding.

How many hydrogen bonds are present in the A and T base pair?\_\_\_\_\_\_\_\_\_\_\_

How many hydrogen bonds are present in the G and C base pair?\_\_\_\_\_\_\_\_\_\_\_



1. In order to fit together to make the most stable the double helix, consider these two factors
* Effectiveness of hydrogen bonding between the two bases
* Number of rings

 What do you notice about the A-T and G-C pairs with regard to these two factors?

1. Try making alternative pairs, such as A-C and G-T and A-A.

Can these pairs make hydrogen bonds?\_\_\_\_\_\_\_\_

Do these pairs fit together as effectively?\_\_\_\_\_\_\_\_\_\_ Explain.

6. Answer questions in “1.34 Consider This”

