

Yummy gummy double helix

Make your own yummy gummy double helix out of sweets and find out about the shape of DNA in the process!

You will use four colours of gummy sweet to represent the four kinds of DNA letters or 'bases' in DNA (usually known as A, T, C and G). Just like in DNA, one gummy will always tend to pair with one other. That means if you know the sequence of one strand, you can work out the sequence and build your other yummy gummy DNA strand . . .

1. Choose 5 or 6 gummy sweets and lay them out end to end.



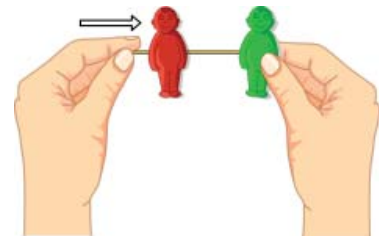
2. Poke toothpicks through the tops of the gummy heads and through their feet to make one strand of your gummy helix.

Don't be concerned, gummy 'bases' don't feel pain!



3. Consult the gummy 'pairing rules' to work out which gummy goes with which.

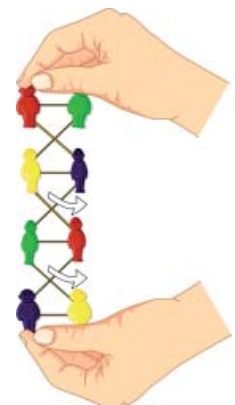
4. Collect the 4 or 5 gummy sweets that pair with your first strand and poke toothpicks into their sides to hold the pairs together.



5. Now connect the heads and feet of the gummy bases in the second strand so that it starts to look like a ladder.



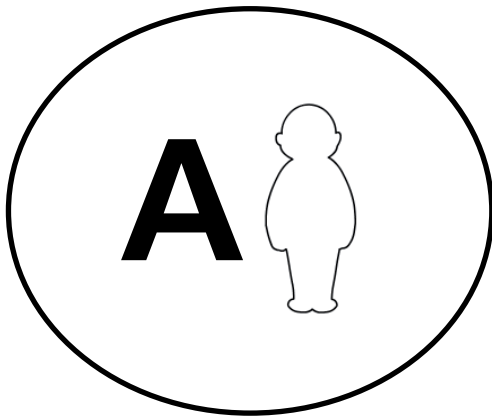
6. Once you have your gummy ladder in place, hold the top and bottom rungs and twist. To get it exactly right, your top hand should turn so that the right-hand rung goes behind the left.



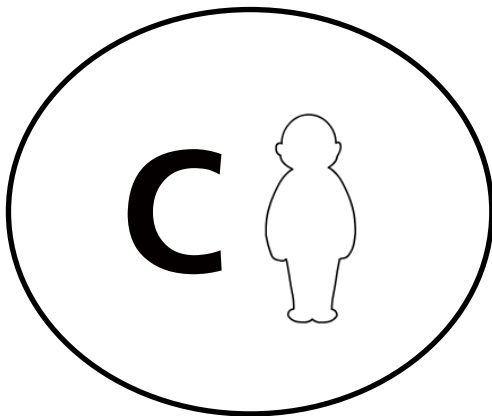
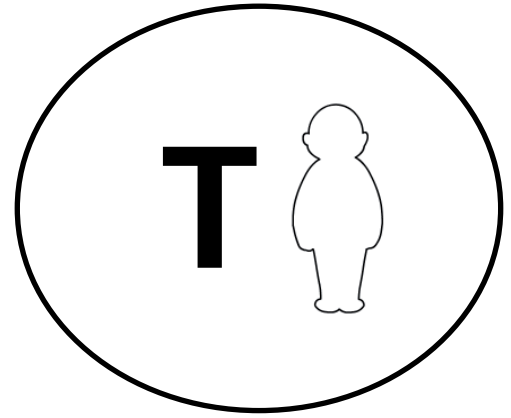
Congratulations! Your yummy gummy double helix is complete!

Yummy gummy double helix

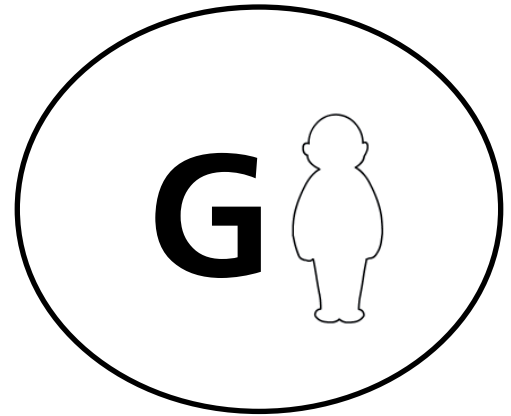
DNA bases : pairing rules



pairs with



pairs with



DNA is made up of four units or 'bases', known as A,C,T and G.

Each of the bases binds with one partner: A with T; C with G.

Your gummy double helix should obey the same rules: look in the circles above to work out which gummies will pair with the colours you chose.