Stuff to do by the end of DNA:

1. Name the parts of the DNA structure
2. Draw a *simple (ha.)* DNA structure

Structure of DNA :

- Anti-parallel (parallel but flowing in opposite direction), double-stranded helix
- Deoxyribose (no oxygen) nucleic acid
- Phosphate group
- Sugar-phosphate backbone (Deoxyribose sugar + Phosphate group)
- Nitrogenous bases (whole lot of nitrogen): TCAG (thymine, cytosine, adenine, guanine) ((or GTA 100))
- Complementary base pairs: C-G, A-T
- Purine (Double: Adenine and Guanine) and Pyrimidine (Single: Thymine, Cytosine)
- Covalent bond
- Nitrogenous bases are bonded by hydrogen bonds
- 3 dimensional

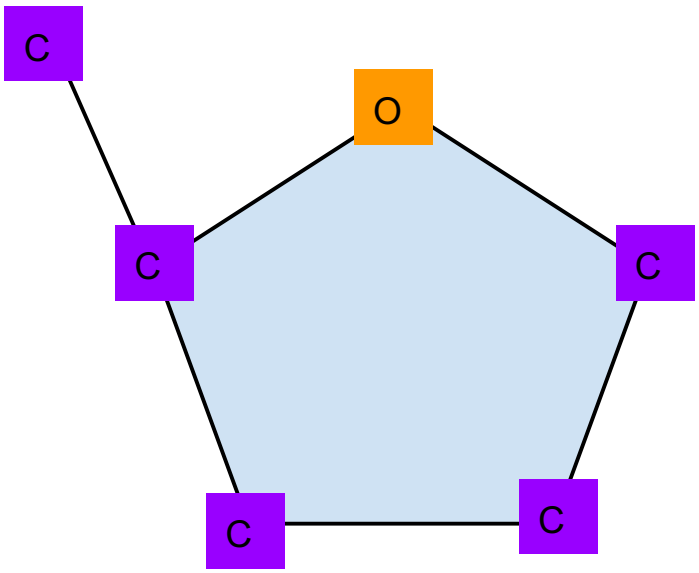
Nucleotide (Building block)

- Deoxyribose sugar (pentose sugar)
- Phosphate group
- Nitrogenous base
- Called 3' carbon or 5' carbon based on which side the phosphate comes out of
- DNA goes from 3' to 5'
- When you wanna add nucleotides, can only add on 3' end of stuff, not 5'
- Hydrogen bonds are like some kind of elastic thing so if you pull it it will break
- Hydrogen bonds are good for messenger dna(?), dna replication, transcription and translation
- All connected by covalent bonds except for those between the bases

Genetic code is found in the way the nitrogenous bases are connected

Adenine can only make 2 hydrogen bonds, guanine needs 3 so they are incompatible
((there are some things that you think wouldn't be a good combination, but they turn out to be the perfect combination)) das right i quoted stiles

How to remember that g and a are the big ones and c and t are the small ones:
G stands for gah, A stands for ahh, C stands for cute, T stands for tiny
gah and ahh are big, cute and tiny are small
when you see something cute you go gah (C-G)
when you see something tiny you go ahh (A-T)




BASE ALWAYS ATTACHED TO CARBON 1, then count clockwise, 5’ is the stick thingy