

DNA DAY 2

Insert name

ENGAGE

- <https://www.youtube.com/watch?v=AVsqTkxDjy8>
- Why do we look like our parents?
- What gets passed down generation to generation?
- What determines our traits?

NITROGENOUS BASES

- There are 4 nitrogenous bases that make up our DNA!
 - Purines
 - Adenine and Guanine
 - Pyrimidines
 - Cytosine and Thymine

BASE PAIRS

- Cytosine and Guanine are paired

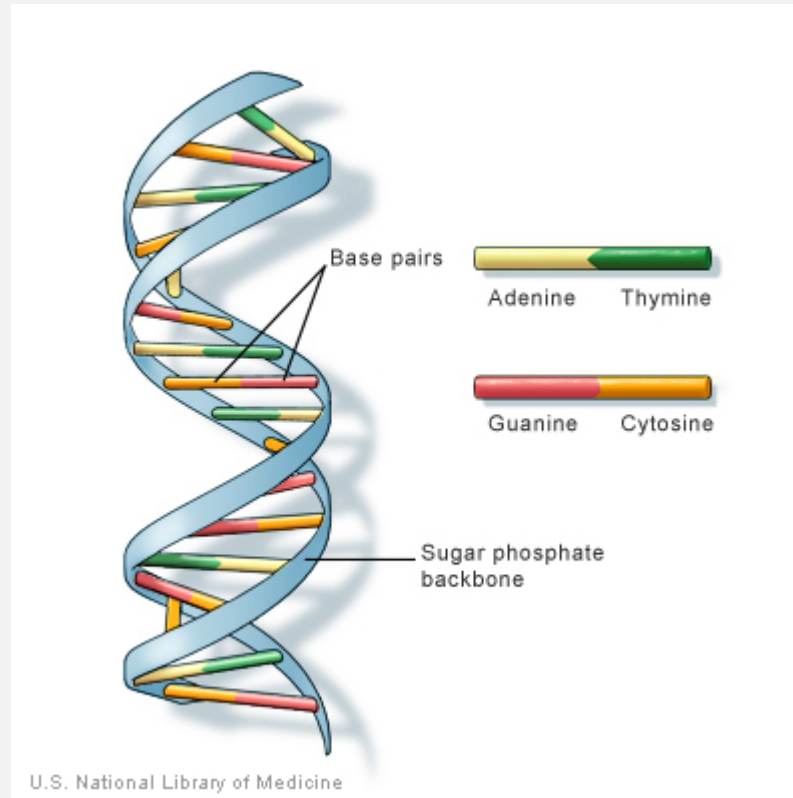


- Adenine and Thymine are paired



EXPLORE

- DNA bracelets!
 - Make your own DNA bracelet
 - Assign a nitrogenous base to a color
 - Adenine
 - Guanine
 - Cytosine
 - Thymine
 - Make the complementary strand!





EXPLAIN

- Discuss the following questions:
 - Were there times you messed up and had to start over?
 - Did it get confusing?
 - Did it get tedious over time?

CODONS

- A sequence of three amino acids that form a genetic code
 - GCA
 - AUG
 - TAG

ELABORATE

- Write down name on white board
- Write the codon for each letter of your name
- Write the complementary of your name sequence

DNA CODE

| Codon | English | Codon | English | Codon | English | Codon | English |
|-------|---------|-------|---------|-------|---------|-------|-----------|
| AAA | a | CAA | q | GAA | G | TAA | W |
| AAC | b | CAC | r | GAC | H | TAC | X |
| AAG | c | CAG | s | GAG | I | TAG | Y |
| AAT | d | CAT | t | GAT | J | TAT | Z |
| ACA | e | CCA | u | GCA | K | TCA | 1 |
| ACC | f | CCC | v | GCC | L | TCC | 2 |
| ACG | g | CCG | w | GCG | M | TCG | 3 |
| ACT | h | CCT | x | GCT | N | TCT | 4 |
| AGA | i | CGA | y | GGA | O | TGA | 5 |
| AGC | j | CGC | z | GGC | P | TGC | 6 |
| AGG | k | CGG | A | GGG | Q | TGG | 7 |
| AGT | l | CGT | B | GGT | R | TGT | 8 |
| ATA | m | CTA | C | GTA | S | TTA | 9 |
| ATC | n | CTC | D | GTC | T | TTC | 0 |
| ATG | o | CTG | E | GTG | U | TTG | space |
| ATT | p | CTT | F | GTT | V | TTT | .(period) |

Quiz time!