**Activity – Name Alias**

**Purpose**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Materials** – yarn and fruit loops (green, red, blue, purple, yellow, orange)

**Procedures:**

1. Write your first name in the space provided

2. Using the letters in your name, write down the 3 nucleotides for each letter of your name. Write these letters under your alias.

3. Using the cereal, create a bracelet from your alias. Place a blue fruit loop on the string to represent the “start” codon of a gene, and then put on the colored cereal that spell out your name. When you are done, place a blue loop on the string to represent the “stop” codon of a gene.

**Data/Results:**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Alias: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bracelet: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Red** | **Green** | **Orange** | **Yellow** | **Purple** |
| A - GCT | G – GGG | M – ATG | S – TCA | Y – TAC |
| B - GCA | H – CAT | N – GAC | T – ACT | Z - TAT |
| C - TGC | I – ATA | O – GAT | U – ACG |  |
| D - GAT | J – ATC | P – CCC | V – GTC |  |
| E - GAG | K – AAG | Q – GAG | W – TGG |  |
| F - TTT | L – CTC | R – CGT | X – GTA |  |

**Conclusion:**

1. When you used your name to create an alias, what stage in protein synthesis did you perform? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. When you used your alias to make your bracelet, what stage in protein synthesis did you perform? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. In protein synthesis, what did your name represent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. In protein synthesis, what did your alias represent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. In protein synthesis, what does your bracelet represent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What is a codon? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. How many codons did your alias have? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Write the mRNA for your name. Tell the amino acids it codes for.

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