

Activity 3.2.2: Codon – Amino Acid Dictionary

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| mRNA | Letter |  | mRNA | Letter |  | mRNA | Letter |
| CGA | A |  | GUA | I |  | CAC | S |
| CGC | A |  | GUG | I |  | CAG | S |
| CGG | A |  | GUC | J |  | CAU | S |
| CGU | A |  | UAA | K |  | ACC | T |
| UCU | B |  | UAG | K |  | GCC | U |
| UCC | B |  | UAU | K |  | GCA | V |
| AGA | B |  | UUC | L |  | GCG | W |
| AGG | B |  | UUU | L |  | AGU | X |
| ACA | C |  | AAC | M |  | AUA | Y |
| ACG | C |  | AAU | M |  | AUG | START /  Y |
| CUA | D |  | GAA | M |  | AGC | Z |
| CUG | D |  | GAC | M |  | ACU | - |
| CUC | E |  | GAG | M |  | AUC | - |
| CUU | E |  | GAU | M |  | AUU | - |
| GGU | F |  | UAC | N |  |  |  |
| GGC | F |  | UUA | O |  |  |  |
| GGA | F |  | UUG | O |  |  |  |
| GGG | F |  | UCG | P |  |  |  |
| AAA | G |  | UCA | P |  |  |  |
| AAG | G |  | GCU | Q |  |  |  |
| CCA | H |  | UGA | R |  |  |  |
| CCC | H |  | UGC | R |  |  |  |
| CCG | H |  | UGG | R |  |  |  |
| CCU | H |  | UGU | R |  |  |  |
| GUU | I |  | CAA | S |  |  |  |

\*Note that for this simulation, codons code for letters instead of amino acids.