|  |  |  |
| --- | --- | --- |
| First letter | Second letter | Third Letter |
|   | U | C  | A | G |  |
| U | Blue | Red | Orange | Yellow | U |
|  | Pink | Purple | Brown | Black | C |
|  | White | Green | Red | Yellow | A |
|  | Orange | Blue | Grey | Maroon  | G |
| C | Full size | Half size | Quarter size | Full size | U |
|  | Half size | Quarter size | Full size | Half size | C |
|  | Quarter size | Half size | Full size | Quarter size | A |
|  | Full size | Full size | Half size | Quarter size | G |
| A | Happy | Sad | Mad | Bored | U |
|  | Sad | Happy | Bored | Mad | C |
|  | Mad | Bored | Happy | Sad | A |
|  | Bored | Mad | Sad | Happy | G |
| G | Square | Circle | Triangle | Star | U |
|  | Circle | Square | Star | Triangle | C |
|  | Triangle | Star | Circle | Square | A |
|  | Star | Triangle | Square | Circle | G  |

1. aaagaatggctgaatgggtatcccatagtctttcgg
2. agaggttatcccagggcttttcatagggtataaccc
3. agagggtcccgaacggattggctgaccgtctcccat
4. actggttagcataccgtatgaccaattgtttggcaa
5. atggaatgccgtactgctttcccaagcgtataacgt
6. accgagttacacacggactaactgaccggatctcct

# Questions

1. What is a codon, and what does it represent?
2. What is the role of mRNA in protein synthesis?
3. What is the role of tRNA in protein sythesis?
4. How does the DNA nucleotide sequence determine the amino acid sequence in a protein?

5. Compare DNA replication and transcription.