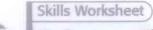
| Name | Class | Date |
|-----------|-------|------|
| A.1894.10 | | |



Science Skills

Interpreting Tables

Use the table below to complete items 1-17.

| Codons in mRNA | | | | | | | |
|----------------|------------------------------------|--------------------------|--|--|------------------|--|--|
| First base | Second base C A G | | | | | | |
| U | UUU Phenylalanine UUA Leucine | UCU UCC UCA UCG | UAU Tyrosine UAA Stop | UGU Cysteine UGA – Stop UGG – Tryptophan | U C A G | | |
| c | CUU CUC CUA CUG | CCU CCC CCA CCG | CAU Histidine CAC Glutamine | CGU CGC CGA CGG | U C A G | | |
| A | AUU Isoleucine AUA AUG - Start | ACU ACC ACA ACG | AAU Asparagine AAA AAA AAG Lysine | AGU Serine AGA AGG Arginine | C A G | | |
| G | GUU GUC Valine GUA GUG | GCU GCC GCA GCG | GAU Aspartic GAC acid GAA Glutamic GAG acid | GGU GGC GGA GGG | C A G | | |

Complete the table below showing sequences of DNA, mRNA codons, anticodons, and corresponding amino acids. Use the list of mRNA codons in the table above to assist you in completing this exercise. Remember that the genetic code is based on mRNA codons.

| Decoding DNA | | | | |
|--------------|------------|-----|------|------|
| DNA | 1 | 2 | GAT | 3 |
| mRNA codon | 4 | 5 | 6 | UAU |
| Anticodon | 7 | UUC | 8 | 9 |
| Amino acid | Tryptophan | 10 | . 11 | . 12 |



| he mRNA codons in the ta | able on the previous te the names of the | t each amino acid sequence. Use page to complete items a-d below amino acids that correspond to each ple is provided for you. |
|--|---|--|
| Example: | | |
| mRNA sequence: | UGU-CCG | cysteine-proline |
| mutation sequence: | UGC-CGC | cysteine-arginine |
| 13. mRNA sequence: | GAA-CGU | |
| mutation sequence: | GAU-CGU | |
| 14. mRNA sequence: | AUC-UGC | |
| mutation sequence: | AUC-UGG | |
| 15. mRNA sequence: | UGU-CCU-CCU | |
| mutation sequence: | UGU-UUC-CCU | |
| 16. mRNA sequence: | GGG-UUA-ACC | |
| mutation sequence: | GGU-UAA | |
| What kind of mutation Explain. | occurred to the ml | RNA sequence in item 16 above? |
| | | |
| | | |