Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_

**Interpreting Diagrams: Understanding the Main Ideas**

The Genetic Code (mRNA)

Proline

Proline

Proline

Proline

Leucine

Leucine

Leucine

Leucine

Arginine

Arginine

Arginine

Arginine

Glutamine

Glutamine

Histidine

Histidine

Serine

Serine

Serine

Serine

Leucine

Leucine

Phenylalanine

Phenylalanine

“Stop” codon

Tryptophan

Cysteine

Cysteine

“Stop” codon

“Stop” codon

Tyrosine

Tyrosine

Alanine

Alanine

Alanine

Alanine

Valine

Valine

Valine

Valine

Glycine

Glycine

Glycine

Glycine

Glutamic acid

Glutamic acid

Aspartic acid

Aspartic acid

Threonine

Threonine

Threonine

Threonine

Isoleucine

Methionine

Isoleucine

Isoleucine

Arginine

Arginine

Serine

Serine

Lysine

Lysine

Asparagine

Asparagine

A

G

U

C

A

G

U

C

A

G

U

C

A

G

U

C

C

C

U

G

A

U

G

A

Third Base in Code Word

First Base in Code Word

Second Base in Code Word

Use the information in the accompanying figure to complete the following table. The first row has been completed to help you get started.

|  |  |  |  |
| --- | --- | --- | --- |
| **DNA codon** | **mRNA codon** | **tRNA anticodon** | **Amino Acid** |
| AAA | UUU | AAA | Phenylalanine |
| GTC |  |  |  |
|  | GGA |  |  |
|  |  |  | Methionine / “Initiator” |
| GAT |  |  |  |
|  | GUG |  | Valine |
|  |  | AUU |  |