**Transcription and Translation – Practice Worksheet**

***Example*:**

**DNA** : G T A C G C G T A T A C C G A C A T T C

**mRNA**: C A U G C G C A U A U G G C U G U A A G

**Codons**: AUG-CGC-AUA-UGG-CUG-UAA

**Anticodons**: UAC-GCG-UAU-ACC-GAC-AUU

**Amino Acids:** START-ARGININE-ISOLEUCINE-TRYPTOPHAN-LEUCINE

***Using the example above, transcribe the following DNA strand into mRNA and translate that strand into a polypeptide chain, identifying the codons, anticodons, and amino acid sequence.***

1. **DNA: A T A C G A A A T C G C G A T C G C G G C G A T T C G G**

mRNA Strand:

mRNA Codons:

tRNA Anticodons:

Amino Acids:

1. **DNA: T T T A C G G C C A T C A G G C A A T A C T G G**

mRNA Strand:

mRNA Codons:

tRNA Anticodons:

Amino Acids:

1. **DNA: T A C G G G C C T A T A C G C T A C T A C T C A T G G A T C G G**

mRNA Strand:

mRNA Codons:

tRNA Anticodons:

Amino Acids:

1. **DNA: G T A C G C G T A T A C C G A C A T T C**

mRNA Strand:

mRNA Codons:

tRNA Anticodons:

Amino Acids:

***Transcribe the following DNA strand into mRNA and translate that strand into a polypeptide chain, identifying the codons, anticodons, and amino acid sequence.***

1. **DNA: C G A T A C A A T G G A C C C G G T A T G C G A T A T C C**