

# Protein Synthesis Practice Problems

Name: \_\_\_\_\_ Per: \_\_\_\_\_ Date: \_\_\_\_\_

**Directions:** For each of the following questions, transcribe the DNA strand into mRNA, section it into its codons, and translate it into amino acids.

1. DNA: **TACTCGGGGCGCATCCAAGAG**

mRNA

Amino acids

2. DNA: **TACGATCGATAGCTAGCTAGC**

3. DNA: **TACACGTATCTTGGCTAGCTA**

**Directions:** For each of the following questions, transcribe the DNA strand into mRNA, section it into its codons, translate it into amino acids.

1. DNA:                   **TAC/TCG/GGG/CGC/ATC/CAA/GAG**  
mRNA                   **AUG/AGC/CCC/GCG/UAG/GUU/CUC**  
Amino acids           Met-Ser-Pro-Ala
  
2. DNA:                   **TACGATCGATAGCTAGCTAGC**  
                             **AUG/CUA/GCU/AUC/GAU/CGA/UCG**  
Met-Leu-Ala-Iso-Asp-Arg-Ser
  
3. DNA:                   **TACACGTATCTTGGCTAGCTA**  
                             **AUG/UGC/AUA/GAA/CCG/AUC/GAU**  
Met-Cys-Iso-Glu-Pro-Iso-Asp