Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_\_\_ ***Mutation Practice Sheet- #1***

***First, watch the “Mutations” video & refer to the PPt (see blog). Next: 1) Fill in the blanks, below. Refer to the Codon chart given in class (or use the chart in textbook). 2) Identify the type of point mutation from these choices and circle where the mutation occurs:***

-Frameshift, Deletion

-Substitution, Nonsense

-Frameshift, Addition

-Substitution, Missense

-Substitution, Silent

**Normal Strand Mutated Strand**

1. 3’TAG CGTTCCACAATG5’ 🡪 3’TAG CGATCCACAATG5’

5’AUC GCAAGGUGUUAC3’ 5’AUC GCUAGGUGUUAC3’

Ile Ala Arg Cys Tyr Ile \_\_\_\_ Arg Cys Tyr

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3’GCAAATCTGTTAACC5’ 🡪 3’GCA AATCTTTAA CC5’

5’CGU UUAGACAAUUGG3’ 5’CGU UUAACAAUU3’

Arg Leu Asp Asn Trp Arg Leu \_\_\_\_ Ile ----

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3’ACG AGTCCGTAGCAA5’ 🡪 3’ACG ATTCCGTAGCAA5’

5’UGC UCAGGCAUCGUU3’ 5’UGC UAAGGCAUCGUU3’

Cys Ser Pro Ile Val Cys \_\_\_\_\_ ---- ---- ----

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3’ATG GCCTGTGAACTG5’ 🡪 3’ATG GCCTGATGAACT G5’

5’UAC CGGACACUUGAC3’ 5’UAC CGGACUACUUGA –3’

Tyr Arg Thr Leu Asp Tyr Arg Thr Thr \_\_\_\_\_

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 3’AAT CGGCTAGATACC5’ 🡪 3’AAT AGGCTAGATACC5’

5’UUA GCCGAUCUAUGG3’ 5’UUA UCCGAUCUAUGG3’

Leu Al Asp Leu Trp Leu \_\_\_ Asp Leu Trp -

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_