Translation Worksheet

_____ occurs when mRNA is in the _____ and it enters the _____.

Ribosomes
Are proteins that read mRNA and build _____.

A ribosome consists of two subunits; the _____ and the _____.
During translation mRNA resides between the two subunits.

There are three sites for tRNA to enter and build a polypeptide chain.

They are called;
1.
2.
3.

Translation occurs in three stages;
1.
2.
3.

Stage 1: Initiation
1. The _____ is recognized by the ribosome along with the _____ (AUG) which codes for _____.
2. mRNA is then read by the ribosome in a _____ direction. For each _____ an amino acid is added.

Define Codon:

Stage 2: Elongation
1. _____ with the amino acid _____ enters the P site.
2. _____ with the correct bases on the _____ enters the A site.
3. _____ catalyses the bonding of the two amino acids.
4. The ribosome moves along the mRNA to the next _____, emptying the _____ and moving the _____ to the E site.
5. As it continues to translate the mRNA, the tRNA is released.
6. This process continues, eventually producing a polypeptide chain (made of amino acids) until the _____ is encountered.

Stage 3: Termination
1. The _____ (UAG, UGA, UAA) is encountered and _____ production is terminated. No amino acids are coded for the stop codon.
2. A protein called the _____ aids in the removal of the _____ from the _____.
3. The _____ and _____ fall apart.
4. The _____ folds into a protein.