**TRANSCRIPTION**

1. DNA unwinds
2. DNA separates (using RNA polymerase)
3. New mRNA bases added
4. mRNA exits the nucleus in groups of 3 nucleotides (codon)
5. DNA Winds back up

**TRANSLATION**

1. mRNA floats through the cytoplasm until it binds with an rRNA ribosome
2. rRNA reads the mRNA sequence one codon at a time
3. tRNA binds to the mRNA using the anticodon
4. tRNA transfers an amino acid to the growing polypeptide chain
5. Once the tRNA transfers the amino acid, it detaches and floats away in the cytoplasm
6. The ribosome continues to read the mRNA sequence
7. Once a stop codon is read, the polypeptide folds up to create a protein and the ribosome disassembles.