

Translation Theme

Protein Synthesis

- ▶ DNA and RNA work together to produce _____
- ▶ Remember: A protein is a specific sequence of amino acids

Protein Review

- ▶ Proteins are made by joining _____ together into long chains, called polypeptides.
- ▶ The bond that forms between amino acids is called a _____ bond

The Genetic Code

- ▶ What is the genetic code, and how is it read?
The genetic code is read _____ “letters” at a time, so that each “word” is three bases long and corresponds to a single amino acid.
- ▶ The first step in decoding genetic messages is to transcribe a nucleotide base sequence from _____.
- ▶ Then the RNA is decoded to make a _____

Codons

- ▶ Each three-letter “word” in mRNA is known as a _____.
- ▶ A codon is a combination of 3 mRNA bases that codes for a specific amino acid.
- ▶ Using a codon chart, determine the amino acid that would code for the mRNA sequences below:
 - ▶ UAC:
 - ▶ AUG:
 - ▶ UGA:

Translation

- ▶ The process of assembling _____ from RNA
- ▶ RNA moves from the _____ where it was transcribed from DNA. It moves into the cytoplasm to a ribosome which assembles the protein
- ▶ The _____ on the _____ RNA matches up with the _____ on the _____ RNA

Hint for Today's Activity:

Remember:

mRNA has the codon
tRNA has the anticodon