

Replication, Transcription and Translation Goals

Biology

The test will INCLUDE the mRNA codon table and the tRNA anticodon table. You can include any other information you might find useful on a separate sheet of paper (you can write on the front and the back). Use the goals below to help you decide what information to include on the study guide. Remember, you can also use your model to help you on the test.

1. Be able to transcribe a series of DNA nucleotides into the complementary mRNA strand.
2. Be able to determine the amino acids associated with a set of mRNA codons (using the mRNA codon table from the “DNA Translation” presentation).
3. Be able to determine the amino acids or letters associated with a set of tRNA anticodons (using the tRNA anticodon table from the “Anticodon Translation Activity”).
4. Be able to determine the tRNA anticodon associated with an mRNA codon.
5. Be able to find an mRNA codon that is associated with an amino acid (using the mRNA codon table from the “DNA Translation” presentation)
6. Be able to find a tRNA anticodon that is associated with an amino acid or letter (using the tRNA anticodon table from the “Anticodon Translation Activity”).
7. Be able to reverse-transcribe a series of mRNA nucleotides to the complementary DNA strand.
8. Be able to determine the mRNA codon associated with a tRNA anticodon.
9. Understand the concepts and processes of replication, transcription, and translation (the Central Dogma!).