

Protein Synthesis Review

1. Fill in the table below.

	DNA	RNA
Sugar		
Nitrogen Bases		
How many strands		

2. Describe DNA replication (include the words: DNA polymerase, nucleotides, and semiconservative).
3. What does semiconservative mean?
4. Describe the process of transcription (include the words: RNA polymerase, RNA nucleotides, nuclear pore, nucleus).
5. Describe the process of translation (include the words: mRNA, tRNA, ribosome, polypeptide, codon).
6. In RNA, what bases pair up?
7. What type of RNA do you use to find the amino acid?
8. What is the function :
 - a. mRNA
 - b. tRNA
9. What is being produced during transcription?
10. What is being produced during translation?
11. What is a codon? Give an example.
12. If a strand of DNA is CTGAATCCG, what would be the complementary strand of mRNA?
13. If an mRNA codon is GUA, what would the tRNA anticodon be?
14. For the mRNA codon GUA, what would the corresponding amino acid be?
15. For the mRNA codon CCG, what would the corresponding amino acid be?
16. How many codons code for "stop"?
17. What do "stop" codons do?
18. What is the codon for the amino acid tryptophan?
19. What are the building blocks of proteins?
20. What are the three parts of a nucleotide?

Protein Synthesis Review

1. Fill in the table below.

	DNA	RNA
Sugar		
Nitrogen Bases		
How many strands		

2. Describe DNA replication (include the words: DNA polymerase, nucleotides, and semiconservative).
3. What does semiconservative mean?
4. Describe the process of transcription (include the words: RNA polymerase, RNA nucleotides, nuclear pore, nucleus).
5. Describe the process of translation (include the words: mRNA, tRNA, ribosome, polypeptide, codon).
6. In RNA, what bases pair up?
7. What type of RNA do you use to find the amino acid?
8. What is the function :
 - a. mRNA
 - b. tRNA
9. What is being produced during transcription?
10. What is being produced during translation?
11. What is a codon? Give an example.
12. If a strand of DNA is CTGAATCCG, what would be the complementary strand of mRNA?
13. If an mRNA codon is GUA, what would the tRNA anticodon be?
14. For the mRNA codon GUA, what would the corresponding amino acid be?
15. For the mRNA codon CCG, what would the corresponding amino acid be?
16. How many codons code for "stop"?
17. What do "stop" codons do?
18. What is the codon for the amino acid tryptophan?
19. What are the building blocks of proteins?
20. What are the three parts of a nucleotide?