1. REPLICATE/MAKE THE COMPLEMENTARY STRAND OF THE FOLLOWING SEQUENCE OF DNA

ATT CGA TAG CAT TTT CCA GAG

2. A. LIST THE TWO PURINE NITROGEN BASES.
   B. ARE PURINES SINGLE RING OR DOUBLE RING?

3. TRANSCRIBE THE FOLLOWING PIECE OF DNA

GAT ACC TAT CAA GCG TAG CCA

4. LIST THREE DIFFERENCES BETWEEN DNA AND RNA

5. A. WHAT IS TRANSCRIPTION?
   B. WHAT IS THE CENTRAL DOGMA?

6. TRANSCRIBE THE FOLLOWING PIECE OF DNA

TTT AAA CCC GGG GAG ATT CAT

7. REPLICATE/MAKE THE COMPLEMENTARY STRAND OF THE FOLLOWING SEQUENCE OF DNA

TAC AAA CAC GCG TAG CCG AGA

8. GIVEN THE FOLLOWING MRNA STRAND, CREATE THE ORIGINAL DNA STRAND

CGA GUC ACA GUG CCC AAG

9. A. NAME THE TWO SCIENTISTS CREDITED WITH DETERMINING THE STRUCTURE OF DNA.
   B. WHAT IS ANOTHER NAME FOR A PROTEIN?
   C. EXPLAIN THE FUNCTION OF mRNA

10. A. WHAT IS THE BUILDING BLOCK/MONOMER OF NUCLEIC ACIDS?
    B. HOW MANY PARTS DOES THE BUILDING BLOCK HAVE?
    C. LIST THE PARTS OF THE BUILDING BLOCK.

11. GIVEN THE FOLLOWING MRNA STRAND, CREATE THE ORIGINAL DNA STRAND

AAA CAG UGU CUU GGC AUA

12. A. WHAT IS THE SHAPE OF DNA?
    B. WHAT PART OF THE NUCLEOTIDES COMPRISE THE SIDES OF THE DOUBLE HELIX?

13. A. WHERE DOES REPLICATION OCCUR IN THE CELL?
    B. WHERE DOES TRANSCRIPTION OCCUR IN THE CELL?

14. A. LIST THE TWO PYRIMIDINE NITROGEN BASES.

B. EXPLAIN THE DIFFERENCE BETWEEN PURINES AND PYRIMIDINES.

REPLICATION/TRANSCRIPTION ACTIVITY NAME _____

1. _____
2. A._____
   B._____

3. _____
4. _____
   _____
   _____

5. A. _____
   B. _____

6. _____

7. _____

8. _____

9. A._____
   B._____
   C._____

10. A._____
    B._____
    C._____

11. _____

12. A. _____
    B._____

13. A. _____
    B._____

14. A. _____

B. _____