Name: Date: Block:

1. DNA replication results in two DNA molecules…
   1. Each with two new strands
   2. One with two new strands and the other with two original strands
   3. Each with one new strand and one original strand
   4. Each with two original strands
2. DNA is copied during a process called…?
   1. Replication
   2. Translation
   3. Transcription
   4. Transformation
3. In eukaryotes, DNA…
   1. Is located in the nucleus
   2. Floats freely in the cytoplasm
   3. Is located in the ribosomes
   4. Is circular
4. During DNA replication, a complementary strand of DNA is made from each original strand. Thus, if a portion of the original strand is CCTAGCT, then the new strand will be…
   1. TTGCATG
   2. AAGTATC
   3. CCTAGCT
   4. GGATCGA
5. Of the four nitrogen bases in DNA, which two are purines and which two are pyrimidines?
   1. Purines: adenine, thymine; pyrimidines: uracil, cytosine
   2. Purines: adenine, thymine; pyrimidines: guanine, cytosine
   3. Purines: adenine, guanine; pyrimidines: thymine, cytosine
   4. Purines: uracil, thymine; pyrimidines: guanine, cytosine
6. The enzyme responsible for adding nucleotides to the exposed DNA bases during replication are…
   1. Replicases
   2. DNA polymerase
   3. Helicases
   4. Template enzyme
7. Which of the following is ***not true*** about DNA replication?
   1. It must occur before a cell can divide
   2. Two complementary strands are duplicated
   3. The double strand unwinds and unzips while it is being duplicated
   4. The new DNA molecule had two newly-made strands