Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_

1. What do the initials DNA stand for?
2. Finish the following DNA sequences?

|  |  |  |  |
| --- | --- | --- | --- |
| 31.  A-  T-  T-  G-  A-  C- | 32.  T-  C-  T-  A-  T-  G- | 33.  A-  A-  T-  C-  G-  T- | 34.  C-  T-  G-  A-  C-  T- |
|  |  |  |  |
| 35.  C-  T-  G-  T-  T-  T- | 36.  A-  A-  T-  G-  G-  A- | 37.  C-  T-  G-  T-  A-  C- | 38.  A-  T-  G-  C-  C-  T- |

1. Explain how DNA replicates?
2. Why is gene mapping important in genetics?
3. What is gene splicing?
4. Essay - Explain how gene splicing is accomplished and what are the advantages and disadvantages??