

Name \_\_\_\_\_

Per \_\_\_\_\_

## DNA and Replication

### Part A:

1. What is the function of DNA in cells?
2. Describe the components and structure of a DNA nucleotide.
3. List the names and abbreviations of the 4 bases
4. Why is DNA called a double helix?
5. What forms the sides of the DNA ladder?
6. What forms the rungs of the DNA ladder?
7. Where and in what form is eukaryotic DNA found?

### Part B:

1. What is meant by the term base-pairing? How is base-pairing involved in DNA replication?
2. Explain how DNA is replicated. In your explanation, state the role of DNA polymerase and explain why the replication process is considered semi-conservative.