Mera naam \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hai

**Polymerase Chain Reaction (PCR) Animation (50 points)**

*Directions: go the following site to investigate the polymerase chain reaction process and be confident in the answers you provide to the following questions using information from: (1) the text on the page(s), (2) the animation itself, or (3) the Paper PCR activity/packet. Save this document to google docs and share with* [*LFatsy625@gmail.com*](mailto:LFatsy625@gmail.com) *once completed. The site is:* [*http://learn.genetics.utah.edu/content/labs/pcr/*](http://learn.genetics.utah.edu/content/labs/pcr/)

1. What is special about the form of DNA polymerase that is used in PCR that is tailored for the specific procedures used?

2. What is the order that solutions are added to the PCR reaction tube? Briefly describe: (1) what each is and (2) its function in the process.

3. What two primer sequences are present in the PCR process? What is the reason for having two primers in this process?

4. What is the specific role(s) that the thermal cycler serves in the process?

5. What are the purposes of the different temperature levels achieved in the thermal cycler?

6. What is the purpose of adding the dNTP’s to the mixture in the PCR process?

7. What are the major differences between DNA replication and PCR?

8. Specify the three steps of PCR, what occurs during each, AND the outcome of each step.

9. In your own words, describe how PCR is like a chain letter?

10. Describe some beneficial uses of PCR technology.

