

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

### Polymerase Chain Reaction

1. Go to: <http://www.pbslearningmedia.org/resource/biot09.biotech.app.pcr/polymerase-chain-reaction/>
2. "Launch" the PCR Application
3. What is PCR and why is it critical?
  
4. What plant is used to extract the genetic material?
5. What "houses" DNA?
6. Name the steps in PCR
  
7. List and define the components of the DNA solution
  
  
8. How are the 2 DNA strands bound together (orientation)?
  
  
9. Name the order the component of the DNA solution should be mixed.
10. After the components of the DNA solution are mixed what is the next step of PCR?
11. What is the purpose of the thermal cycler?
12. What happens as the solution reaches boiling point?
  
  
13. Explain in detail what happens during the Replication phase.