



# COC Biotechnology Program

## PCR/ALU Inset Post Lab

1. What is an ALU insert, and which ALU insert is unique to humans? How many copies do humans have, and where is it thought to have arisen from?
  
2. What purpose does the Chelex solution serve?
  
3. Describe the function of DNA primers in PCR reactions.
  
4. What is the function of TAQ polymerase in PCR reactions?
  
5. What occurs at the three different steps of the PCR cycle? What instrument is used to perform these repeated temperature changes?
  
6.
  - a. How many base pairs will be present in your sample if the ALU insert is present?
  - b. How many base pairs will be present in your sample if the ALU insert is absent?
  - c. Describe (or draw) the gel band pattern you would expect if you are heterozygote for the ALU insert. Homozygous?