



## COC Biotechnology Program

### Gel Electrophoresis and DNA Fingerprinting Post Lab

1. What electrical charge does DNA carry?
2. If you were to use a 4% agarose gel instead of a .8% agarose gel, what effects would this make on the electrophoresis gel and why?
3. What purpose does the buffer solution serve?
4. Explain why ladder DNA was run with your gel. What would be the effect on your results if ladder DNA were not present?
5. What possible errors could occur if loading dye was not added to your sample before the loading of the wells?
6. When graphing your distance migrated results, what form should the graph take so that the results can be interpolated easily?
7. Explain how Ethidium Bromide allows us to visualize the DNA fragments.
8. What is an endonuclease and how does it work?