

Pre-lab # 6B: Molecular Biology
(DNA Fingerprinting)

1. What are restriction enzymes (endonucleases) and how are they used in gel electrophoresis?
2. Give examples of three restriction enzymes and what sequences they recognize for cutting.
3. What organism were restriction enzymes first isolated (removed) from? Why would they need these enzymes in nature?
4. What is the overall charge on DNA? What functional group on DNA is responsible for this overall charge?
5. Explain why and how DNA is separated into different bands during gel electrophoresis. (Be thorough)

