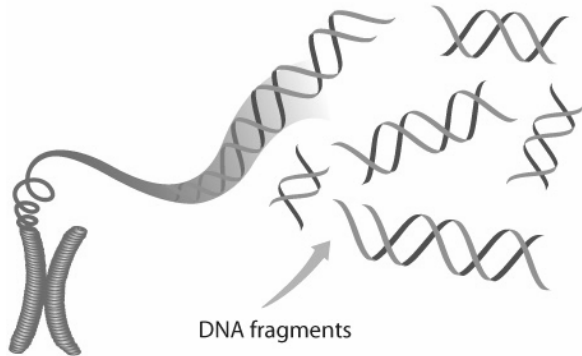


**CHAPTER 18**  
**OVERHEAD**

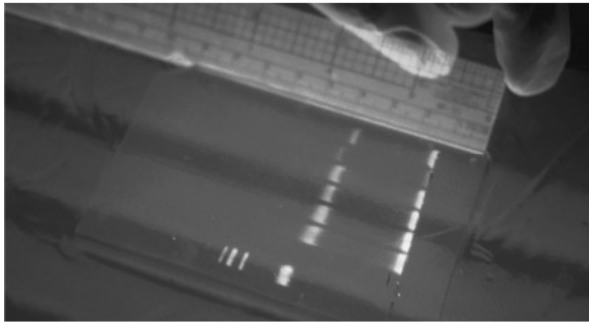
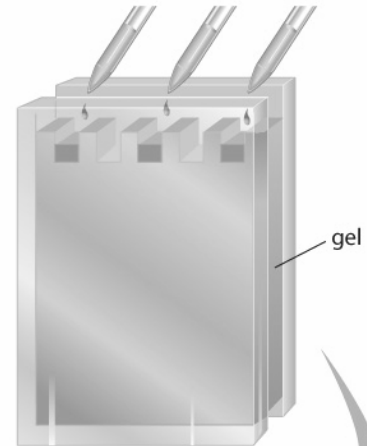
# Gel Electrophoresis

**BLM 18.3.9**

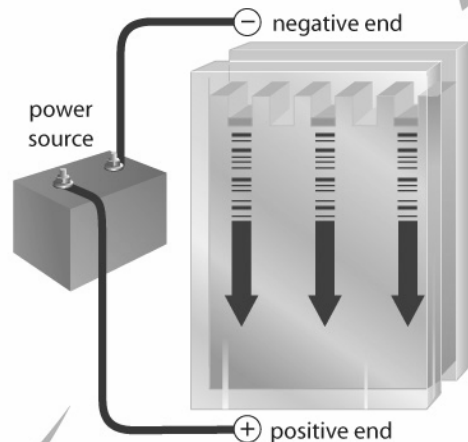
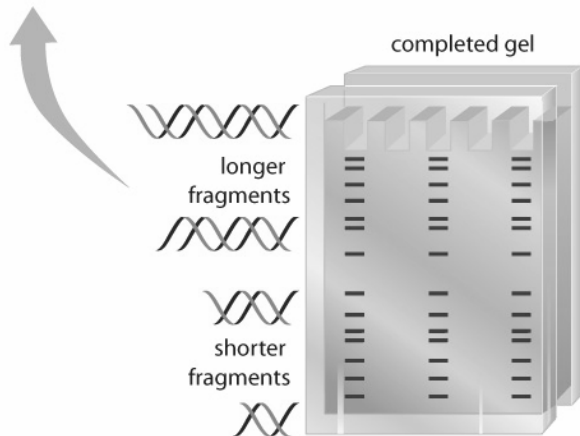
- A Restriction enzymes** Either one or several restriction enzymes are added to a sample of DNA. The enzymes cut the DNA into fragments.



- B The gel** A gel, with a consistency similar to gelatin, is formed so small wells are left at one end. Small amounts of the DNA sample are placed into these wells.



- E** Before the DNA fragments are added to the wells, they are treated with a dye that glows under ultraviolet light, allowing the bands to be studied.



- C The electrical field** The gel is placed in a solution, and an electrical field is set up so one end of the gel is positive and the other end is negative.

- D The fragments move** The negatively charged DNA fragments travel toward the positive end. The smaller the fragment, the faster it moves through the gel. Fragments that are the farthest from the well are the smallest.