

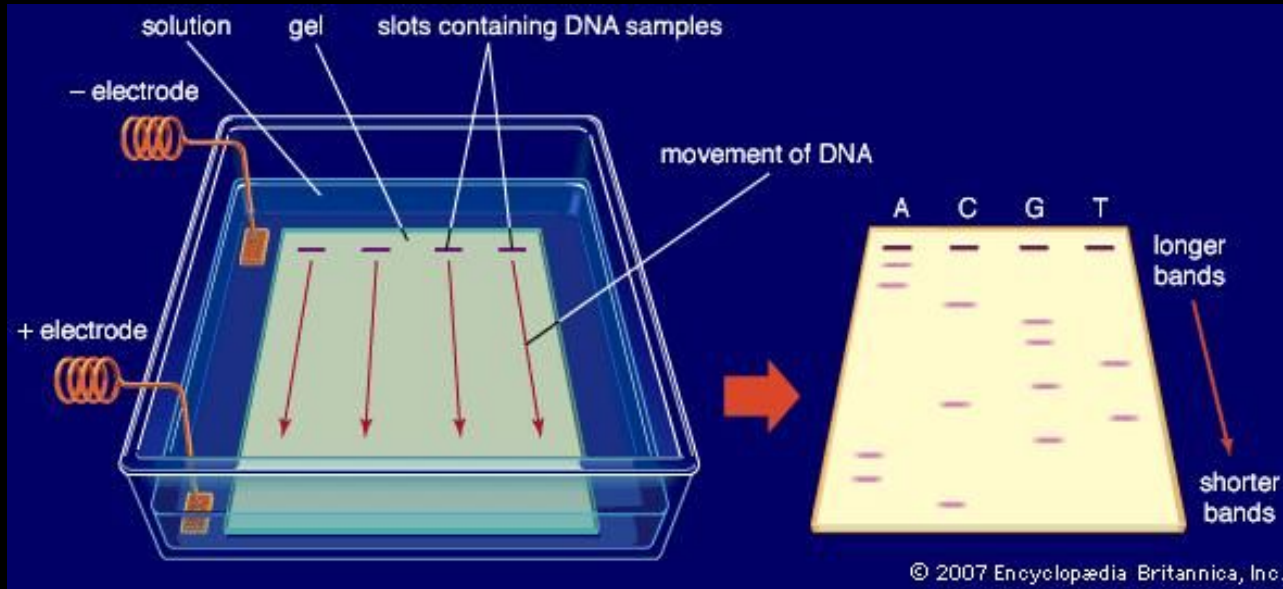
Introduction to Gel Electrophoresis



What do you remember about DNA?

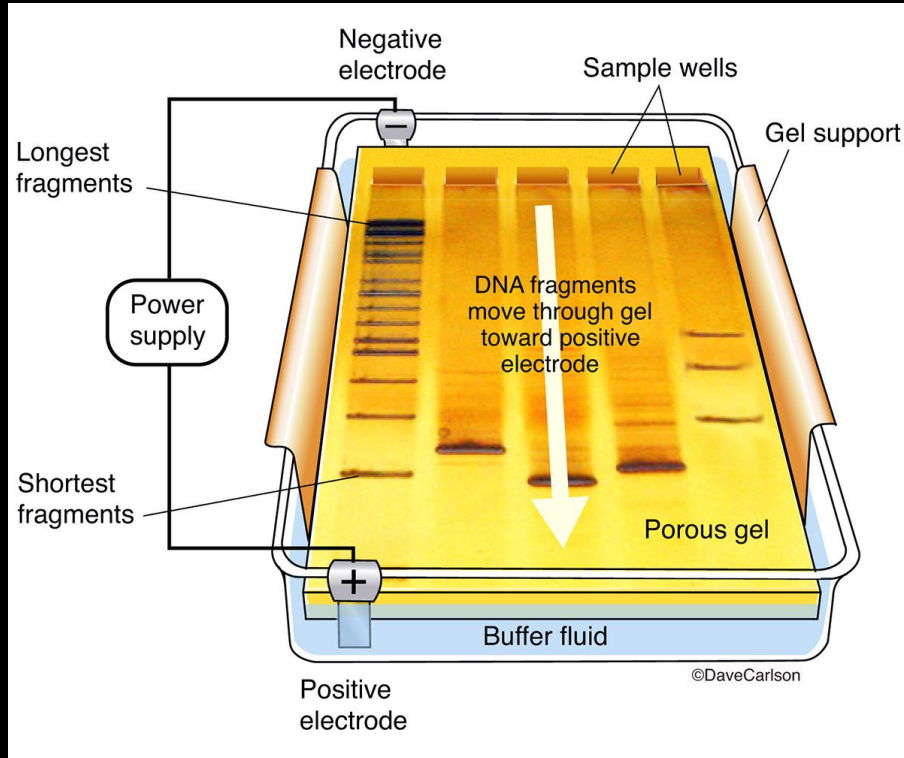


Gel Electrophoresis



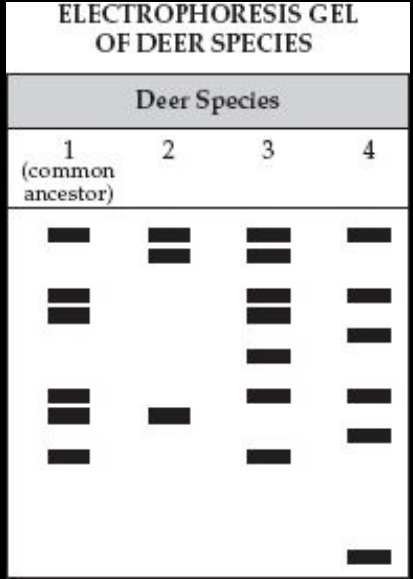
Gel Electrophoresis - a method for separation and analysis of DNA/protein

Separation of Molecules

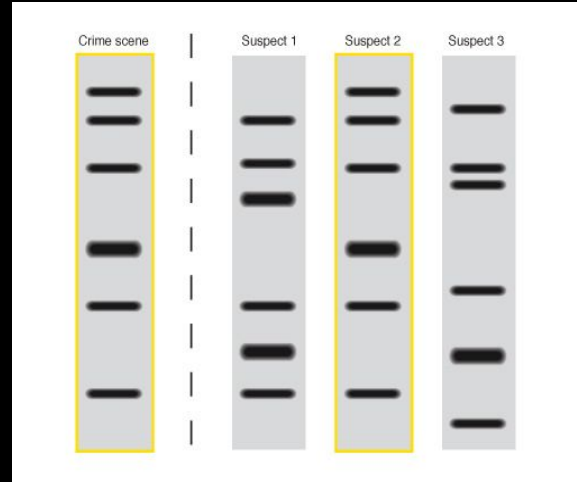


Separation of molecules is based on **size** and **charge**

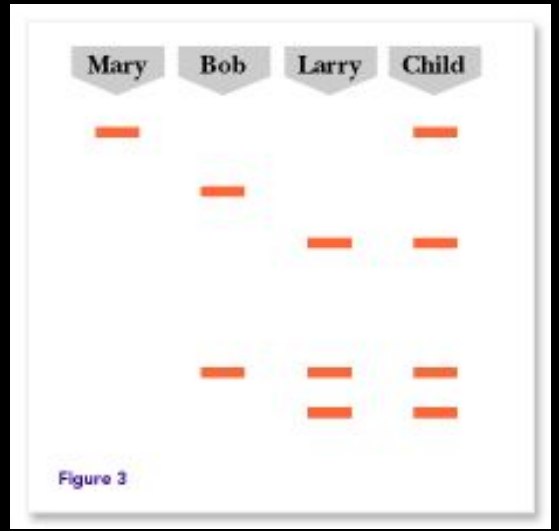
Purpose



Studying evolutionary relationships

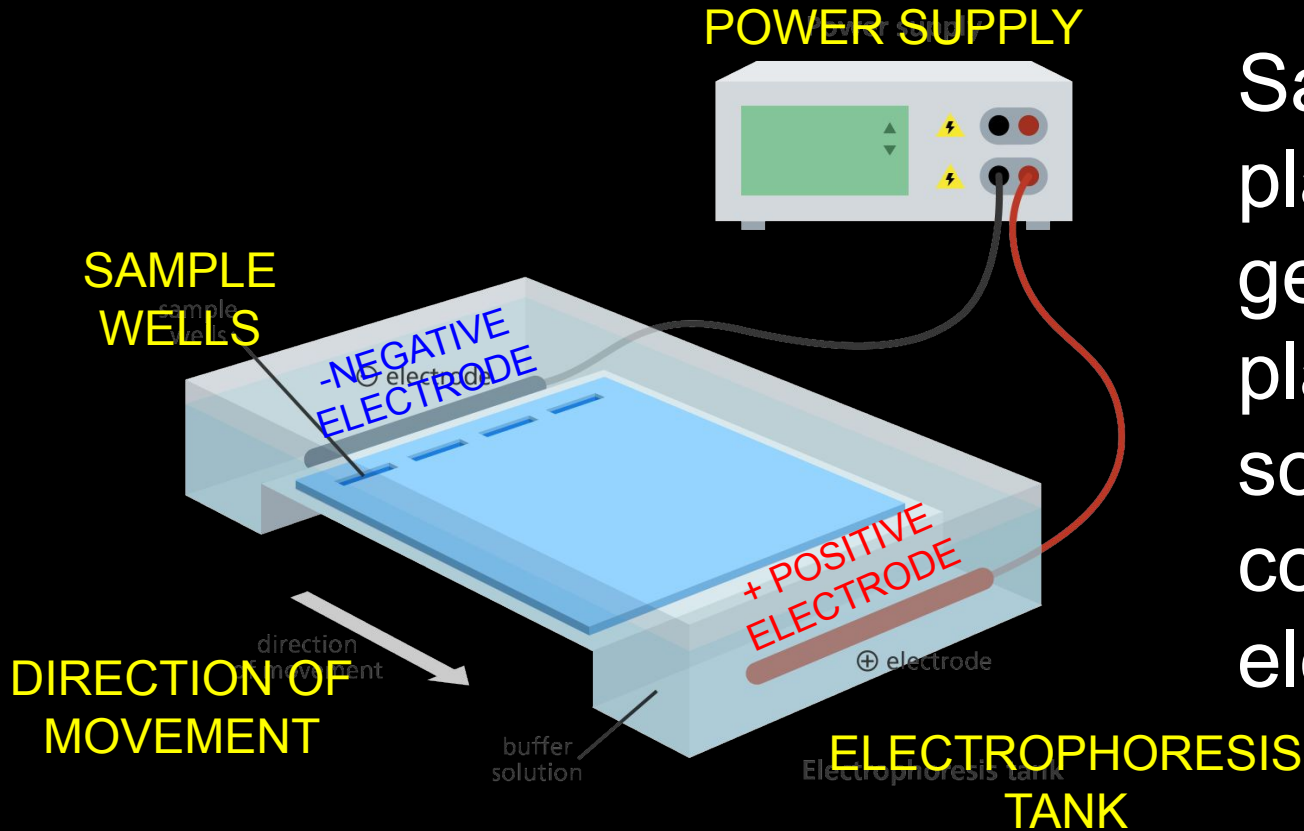


Forensics: DNA Fingerprinting



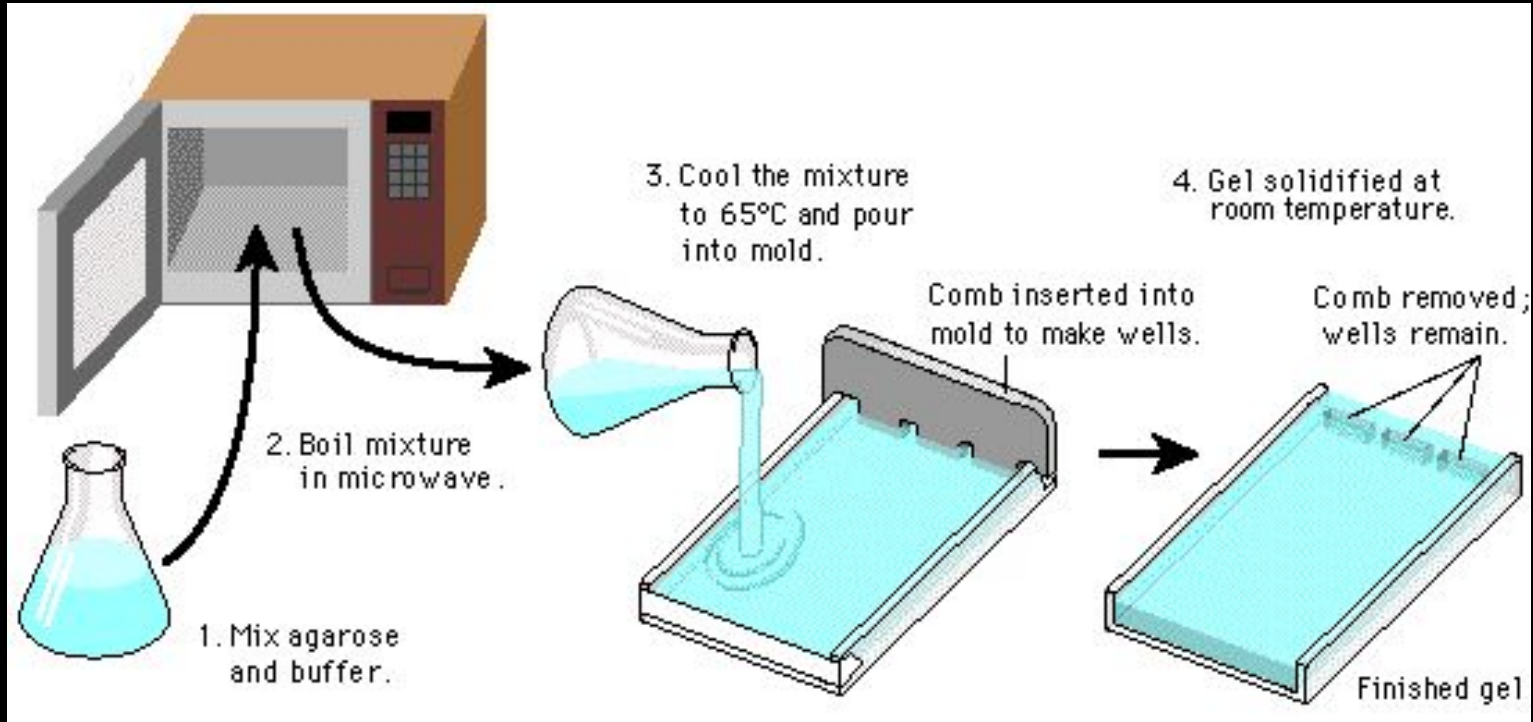
Paternity Testing

How Does it Work?



Samples are placed in a gel, which is placed in a solution that conducts electricity

Step 1



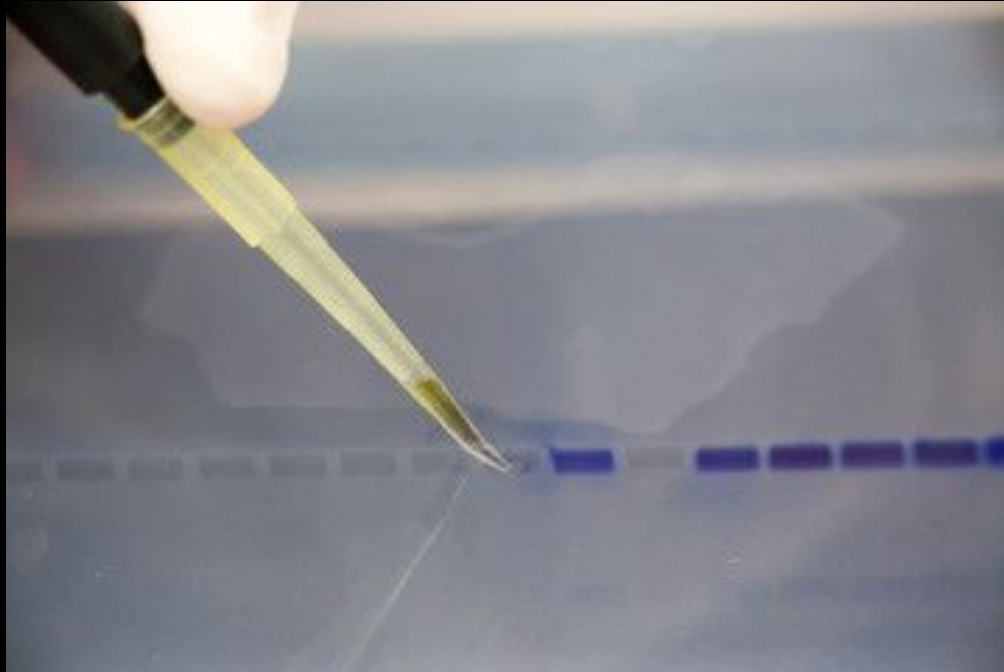
Prepare agarose gel

Step 2



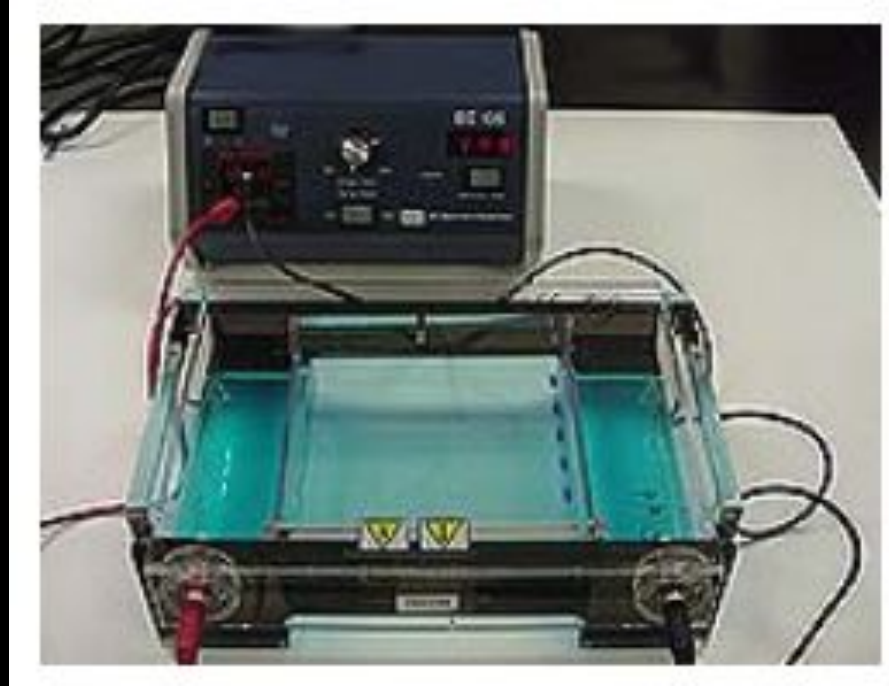
Prepare DNA samples

Step 3



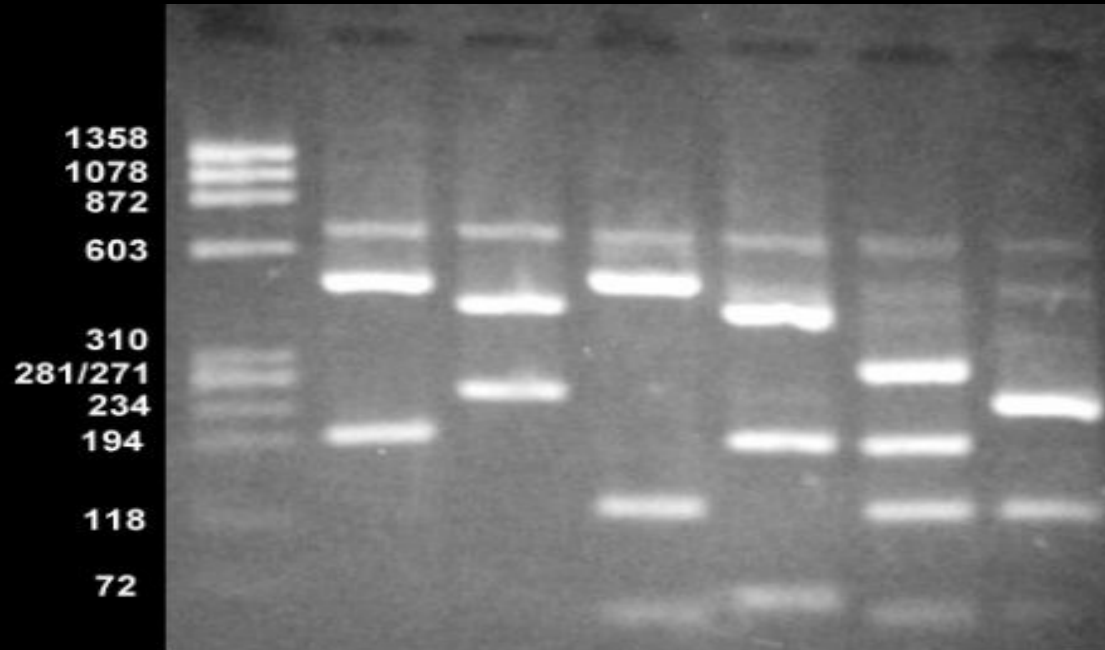
Load samples into gel

Step 4



Connect gel to electric current

Step 5



Analyze DNA pattern

YouTube Gel Electrophoresis

