

# Flinn Forensic Files—DNA Verification Worksheet

## Observations



## Post-Lab Questions and Post-Lab Analysis *(answer on a separate sheet of paper)*

- Using a metric ruler, measure the migration distance in millimeters for each band and sketch the observed DNA banding pattern in the *Observations* section above.
- Complete Data Table below.

DNA Evidence		DNA Sample #1		DNA Sample #2		DNA Sample #3	
DNA Fragment No.	Migration Distance (mm)	DNA Fragment No.	Migration Distance (mm)	DNA Fragment No.	Migration Distance (mm)	DNA Fragment No.	Migration Distance (mm)

- Evaluate the resulting banding patterns of the simulated crime scene DNA and the possible suspects. Give your opinion as to the identity of the guilty party. Justify your answer. DNA Sample 1 is from Kyle Long, DNA Sample 2 is from Ralph Hutchins, and DNA Sample 3 is from Natasha West.
- List three errors that could affect the outcome of any gel electrophoresis procedure.
- Briefly summarize how gel electrophoresis is used to separate molecules.
- Why would a forensic scientist use the Polymerase Chain Reaction (PCR) technique to prepare DNA samples for analysis?