

Go to “classzone.com”. Click on High School<California<Go. Then chose the McDougal Littell book with the hatching alligator on it. Under “Labs” chose Virtual Labs, then pick Gel Electrophoresis.)

*Follow the steps and answer the questions below.*

1. What evidence was found at the crime scene?
  
2. Explore the science lab and list the function of the following items:
  - a. Ultraviolet Light Box:
  
  - b. TBE Buffer:
  
  - c. Ethidium Bromide:
  
  - d. Micropipette:
  
  - e. Digested DNA Samples:
  
  - f. DNA Markers:
  
  - g. Bromophenol Blue
  
3. Click on “Background”. Explain what a DNA Fingerprint is.
  
4. Click “Procedure”. Answer this question from your notebook: How can comparing DNA fingerprints be used to identify who committed a crime? (*Hint: you may need to fake an answer in the notebook to continue*)

Continue with the procedure steps.

5. After Step 11, use the info you collected and complete the chart. Record the estimated length in base pairs (bp) of DNA fragments found in each sample. Estimate the # by comparing it to the marker DNA. (*Hint: fill in the chart online to advance*)

Band	Marker DNA (bp)	Victim DNA (bp)	Suspect 1 DNA (bp)	Suspect 2 DNA (bp)	Evidence DNA (bp)
1					
2					
3					
4					
5					
6					

Answer the notebook Questions:

6. Evaluate: Does the DNA found on the hair match suspect 1 or suspect 2?

