**Part 1**

Gel Electrophoresis Lab

Go to <http://learn.genetics.utah.edu/content/labs/gel/>

1. List the materials needed to make a gel
2. Explain how you made the gel
3. Explain how you set up the apparatus for the gel
4. What does the buffer do?
5. How was the DNA loaded into the gel? (list the steps that were taken)
6. What kind of charge does DNA have? How does this affect how it moves through the gel?
7. Draw a picture of what your gel looked like after the current was applied and the gel was stained. Label the short DNA strands and Long DNA strands.
8. Why do short and long strands move at different rates in the gel?

**Part 2**

Go to Link: <http://www.teachersdomain.org/asset/tdc02_int_creatednafp2/>

[1. Who committed the crime?](http://www.teachersdomain.org/asset/tdc02_int_creatednafp2/)

2. What additional steps were taken in this procedure to preserve the DNA fingerprint?

3. In what other way is a DNA fingerprint used?

4. Look at the gel pictured below and identify the father of the child.



4. How is reading a crime scene DNA fingerprint different from reading a DNA fingerprint for paternity testing?