

Name: _____

Electrophoresis and RFLP Analysis Lab Questions

5-point Assignment

Each question is worth 1 point.

Use the back of this sheet if you need more room.

1. Briefly explain the action of a restriction enzyme on DNA. Why do bacteria produce restriction enzymes?

2. Why does DNA move through the gel when an electrical current is applied?

3. What are some potential sources of error in this experiment? List at least two.

4. Which suspect's DNA pattern matched the evidence retrieved from the crime scene? # _____
Explain why you are sure that the DNA samples are from the same person.

5. You have two samples of human genomic DNA. You digest one with a restriction enzyme that has a four base-pair recognition sequence and the other with a restriction enzyme that has an eight base-pair recognition sequence. Which treatment will probably produce more restriction fragments? Why?