**Lambda DNA restriction enzyme digestion and gel electrophoresis LAB.**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Lane contents key: Data: Voltage: Time:

**Analysis Questions:**

1. On what basis is electrophoresis separating DNA molecules?

2. Why does the stain have to be included in the gel?

3. Why do we need millions of lambda genomes to do this experiment, i.e. Why cant we do this experiment with just one lambda virus?

4. Why do we add sample loading buffer to the DNA before loading the gels?

5. Explain how we might use the migration of lambda DNA restriction fragments of known size to estimate the size/migration patterns of DNA fragments of unknown size or patterns.