

## **RDM Day One Interpretation Questions**

- 1.** Interpret your data. This interpretation should include answers to:
  - Did you see what you expected to see on your gel?
  - What were the sizes of the bands in each lane?
  - How did you figure out the sizes of the bands in each lane?
  - What might each band represent?
  - What is enzyme X?
  
- 2.** Draw the restriction map of pUGFP that you determined from your data. Include the total size of the plasmid, the size of each fragment, and the location and identity of each restriction enzyme cut site.
  
- 3.** Why do we want to insert the gene encoding GFP into pET? Why would leaving the gene encoding GFP in pUGFP not give us the experimental result (green glowing bacteria) we are seeking at the end of RDM?
  
- 4.** Compare and contrast today's agarose gel electrophoresis with the SDS-PAGE we did in PBC by stating whether the two are SIMILAR or DIFFERENT based on the following properties of SDS-PAGE:
  - a.** We used SDS-PAGE to separate molecules by size, such that the larger ones ran slower through the gel than the smaller ones.
  - b.** We denatured the molecules we were going to run on our SDS-PAGE gel before we ran them.
  - c.** We used a non-specific dye that bound to all of the molecules that were run through our SDS-PAGE gel so that we could visualize them.