

Name:  
Date:

# Plasmid Mapping Worksheet 2: Introduction to Mapping

## Comprehension Problems

Answer the following comprehension questions

1. Below is a diagram of a novel plasmid known as pC101. The plasmid consists of a total of 6300bp. Select restriction sites have already been marked on the plasmid.

- What restriction enzymes were used? \_\_\_\_\_
  - How many restriction enzymes were used? \_\_\_\_\_
  - How many restriction sites are present on this map? \_\_\_\_\_
  - Why is the number of restriction sites different than the number of enzymes used? \_\_\_\_\_
- d. If all restriction enzymes were used to cut this plasmid, how many fragments would be produced?  
\_\_\_\_\_
- e. Calculate the sizes of each fragment that would be produced. Denote the fragment sizes on the map below.

