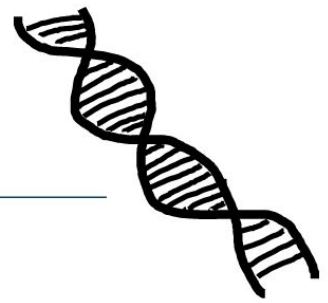


Name:  
Date:

# Plasmid Mapping Worksheet 6: Mapping Practice



## Comprehension Problems

### Plasmid Mapping

1. As part of their molecular biology class, a group of students digested an unknown plasmid (pPRC2, total length = 16.1kb) using combinations of various restriction enzymes listed below. They electrophoresed their digested product and counted both the number of fragments produced, as well as the size of each fragment. Their results are summarized in the table below.

a. Using the information provided in the table below, construct a restriction map of the unknown plasmid.

Enzyme(s)	No. Fragments	Fragment sizes
NspI	3	2.5kb, 5.3kb, 8.3kb
BseRI	2	4.7kb, 11.4kb
NdeI	2	5.8kb, 10.3kb
NspI + BseRI	5	0.3kb, 2.2kb, 2.5kb, 2.8kb, 8.3kb
NspI + NdeI	5	0.5kb, 2kb, 3kb, 5.3kb, 5.3kb,
BseRI + NdeI	4	0.2kb, 4.5kb, 5.6kb, 5.8kb

