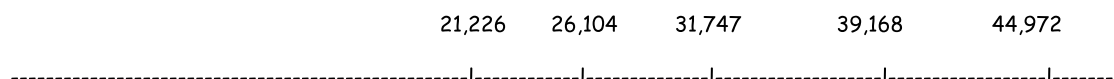


**Restriction maps of the linear  $\lambda$  genome**

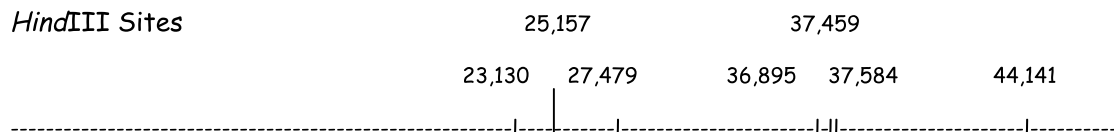
Lambda ( $\lambda$ )



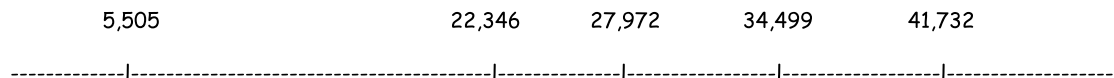
*EcoRI* Sites



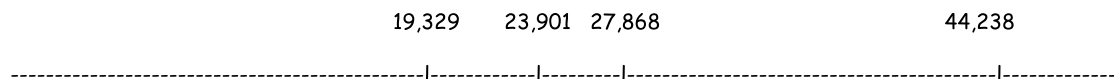
*HindIII* Sites



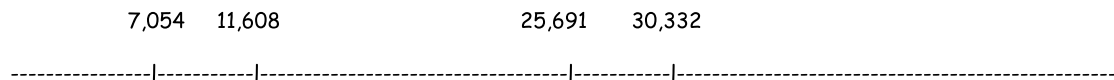
*BamHI* Sites



*NcoI* Sites



*BmrI* Sites



*StuI* Sites



## Gel electrophoresis: sort and see the DNA

### Making a DNA fingerprint

In this activity, you will model the construction of DNA fingerprints for a viral genome using different restriction enzymes. You will also practice interpreting restriction maps and visualize how the process of gel electrophoresis separates DNA fragments.

### DNA restriction fragment size chart

**Directions:**

List your DNA fragments in the following chart under the column of the appropriate restriction enzyme.

List each fragment, from largest to smallest.

<i>EcoRI</i>	<i>HindIII</i>	<i>BamHI</i>	<i>NcoI</i>	<i>BmrI</i>	<i>StuI</i>

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

Date: \_\_\_\_\_

**DNA fingerprints**

<u>Marker</u>	<u>EcoRI</u>	<u>HindIII</u>	<u>BamHI</u>	<u>NcoI</u>	<u>BmrI</u>	<u>StuI</u>
(50,000)						
(30,000)						
(20,000)						
(15,000)						
(10,000)						
(5,000)						
(2,500)						
(1,000)						