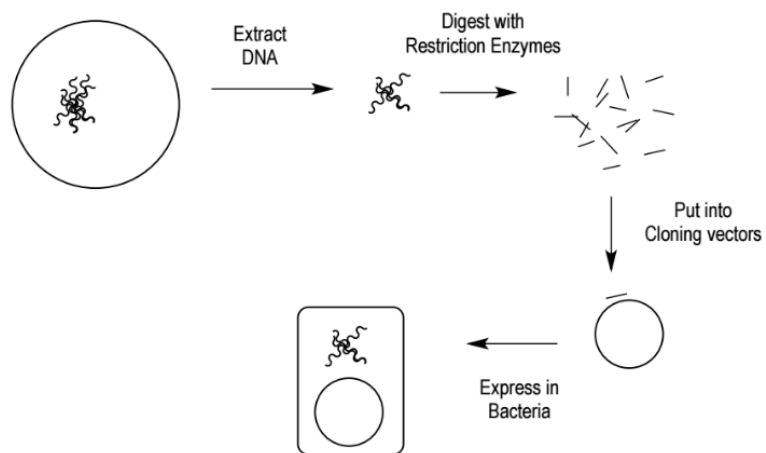


CONCEPT: METHODS FOR ANALYZING DNA AND RNA

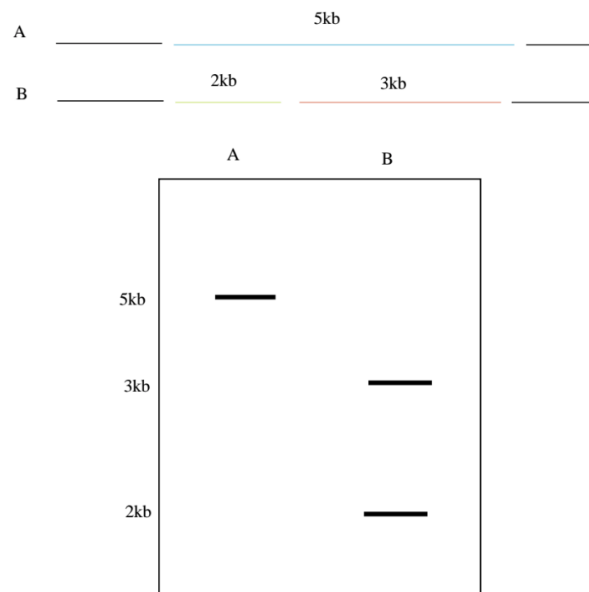
- Geneticists use a variety of _____ to study DNA and RNA
 - **Libraries** are collections of bacterial clones with genetic sequences in them
 - **Genomic libraries** is a collection of small fragment of the entire genome
 - **cDNA libraries** are collections of small fragments of complementary DNA (represents mRNA)

EXAMPLE: Genomic Libraries



- Blotting is a method used to separate and _____ DNA or RNA
 - **Southern blots** separate genomic DNA
 - **Northern blots** separate and visualize RNA sequences

EXAMPLE:



PRACTICE:

1. In terms of molecular biology, what is a library?
 - a. A place where molecular biology textbooks are stored
 - b. A collection of clones containing short genetic sequences
 - c. A collection of clones containing a large collection of proteins
 - d. A collection of clones with different mutant phenotypes

2. If you had a sample of RNA to analyze, which of the following techniques would you most likely use?
- a. Southern Blots
 - b. SDS-PAGE Blots
 - c. Northern Blots
 - d. Western Blots