

CONCEPT: NUCLEIC ACID HYBRIDIZATION

● **Hybridization** takes advantage of the fact that complementary nucleic acid strands will form _____

□ **Southern blotting** detects specific genes in cellular DNA

- DNA from a cell is separated by gel electrophoresis

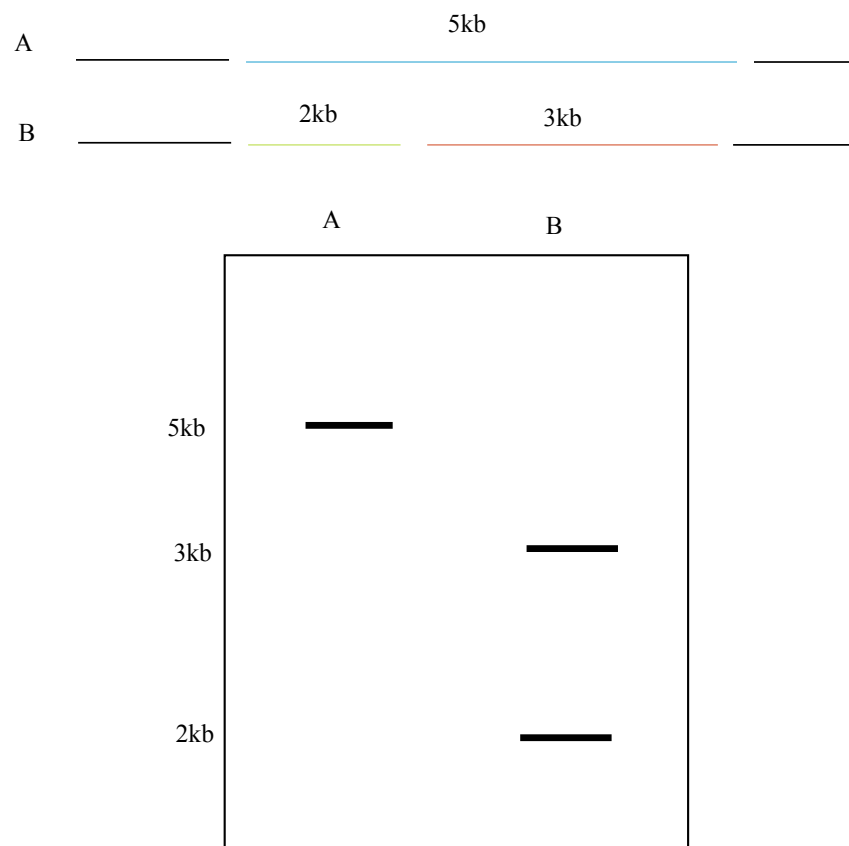
- The DNA is transferred to a filter paper

- A **DNA probe** complementary to a sequence of interest is incubated with the filter

- The probe is fixed with a fluorescent or radioactive molecule for detection

□ **Northern blotting** detects specific RNA sequences

EXAMPLE: Southern Blotting



PRACTICE:

1. Which method is used to detect RNA sequences?
 - a. Northern blotting
 - b. Southern blotting
 - c. Western blotting
 - d. Eastern blotting