

# Biotecrnology

## Recombinant DNA:

### Important Terms to Know:

1. Restriction Enzyme:
2. Sticky End:
3. Plasmid:
4. Transgenic Organism:

### Uses for Transgenic Organisms:

1. Agriculture:

2. Pharmaceuticals:

## RFLP:

- Everyone has these sections of DNA but the \_\_\_\_\_ cut them into \_\_\_\_\_ different sized pieces.
- The way your DNA cuts is specific to \_\_\_\_\_.

### How do we see the pieces?

#### Gel Electrophoresis

6. Separates DNA according to the \_\_\_\_\_ of the pieces (fragments)
  7. DNA is put into a \_\_\_\_\_ like substance and an \_\_\_\_\_ charge is applied.
  8. Since DNA is negatively charged which direction will it move?
  9. \_\_\_\_\_ pieces get "stuck" in the gel and \_\_\_\_\_ pieces can move further.
  10. This makes a " \_\_\_\_\_ " unique \_\_\_\_\_ to each person \_\_\_\_\_
- Uses:
- a. Matching DNA at a \_\_\_\_\_ scene
    - i. Where would you find DNA?
  - b. \_\_\_\_\_ testing
    - i. How?
  - c. \_\_\_\_\_ relatedness

# Biotechnology

## Human Genome Project (HGP)

What is it?

Accomplished using:

Why was it done?

S. Proulx/Scientific

## Gene Therapy:

What is it?

I. Agriculture:

## Cloning: Therapeutic Cloning:

What is it?

3. Biowing:

5. Sticly Eng:

Accomplished using:

Tubular Testes to Know:

Recombinant DNA:

Step 1:

c. \_\_\_\_\_  
replasmids

f. Hows

p. \_\_\_\_\_  
testing

1. Where would you find DNAs

Step 2:

d. Watching DNA of a \_\_\_\_\_

Ques:

to each bacterial

\_\_\_\_\_  
ruides

10. This makes a

\_\_\_\_\_  
further:

Step 3: \_\_\_\_\_  
pieces can move

2. \_\_\_\_\_  
pieces get stuck, in the gel

question will it move?

8. Since DNA is negatively charged which

Why use stem cells?

\_\_\_\_\_  
charges is

1. DNA is put into a \_\_\_\_\_  
likes

## Ethical Considerations:

A. generate DNA according to the \_\_\_\_\_

Gel Electrophoresis

How do we see the pieces?

• The way you DNA cuts is specific to \_\_\_\_\_

\_\_\_\_\_  
different sized pieces

• \_\_\_\_\_  
cut them into

• Everyone has these sections of DNA but the

RETB: