

Name: _____ Date: _____ Period: _____

Molecular Cloning and DNA Technology

1. When the recombinant DNA is transformed into the host the host cell is now considered a _____.
A. ligated
2. After ligation of the inserted DNA and the plasmid DNA, you now place the _____ into a host bacteria cell.
B. transformation
3. Enzymes called endonucleases or _____ "digest" or cut DNA at sequence specific sites.
C. selective breeding
4. After digestion of both the DNA you are inserting and the plasmid DNA, the pieces are then _____ together.
D. genetic engineering
5. The _____ must be cut so that it is open to accept the bacterial DNA.
E. plasmid
6. The enzyme _____ is added to a reaction to help bond plasmid DNA and the DNA that is being inserted.
F. genetically modified organism
7. The practice of selectively mating individuals with desired traits. _____.
G. recombinant DNA
8. Recombinant plasmid DNA will be taken up into the bacteria cell by a process called _____.
H. transgenic organism
9. _____ such as antibiotic resistance genes are added to the recombinant plasmid.
I. cloning vector
10. A way to locate a specific gene in one organism, cut the gene out, then transfer the gene into a different organism.
_____.
J. DNA ligase
11. Genetic structure that will carry the source DNA into the recipient cell. _____.
K. artificial selection
12. Before molecular cloning is complete, the DNA will undergo this type of asexual reproduction. _____.
L. genetic markers
13. What is a GMO? _____.
_____.
M. restriction enzymes
14. Also known as selective breeding. _____.
_____.
N. binary fission