

Name _____ Period _____

SECTION 4-3 Advances in Genetics

1. What are two types of selective breeding? _____ and _____

2. What is cloning? _____

3. How is bacteria used in genetic engineering? _____

4. How is gene therapy used to treat genetic disorders _____

5. What is the Human Genome Project? _____

Match each term with its definition by writing the correct letter in the blank.

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| _____ 6. The process of selection a few organisms with desired traits to serve as parents of the next generation | a. inbreeding |
| _____ 7. Crossing two individuals that have identical or similar sets of alleles | b. clone |
| _____ 8. Crossing two genetically different individuals | c. gene therapy |
| _____ 9. Organism that is genetically identical to the organism from which it was produced | d. selective breeding |
| _____ 10. Process in which genes from one organism are inserted into the DNA of another organism | e. hybridization |
| _____ 11. Inserting working copies of a gene directly into the cells of a person with a genetic disorder | f. genetic engineering |
| _____ 12. all the DNA in one cell of an organism | g. genome |