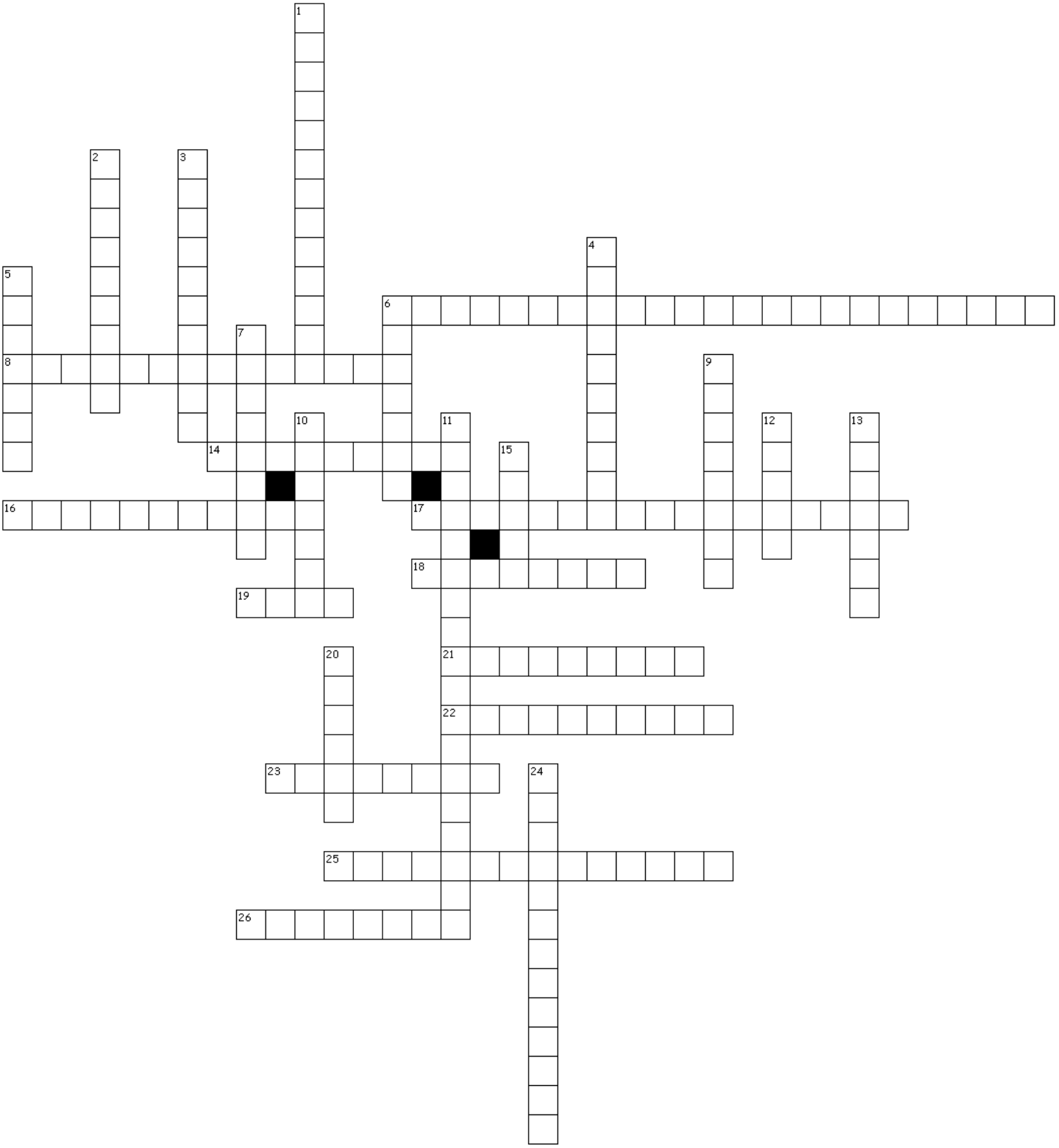
ASSG: ALL

Name _____

Ch. 13 Genetic Engineering, Chapter Summary

Date _____ pd. ____



Across

6. a techniques scientist used to make many copies of a certain gene.
8. produced by combining DNA from different species or different sources.
14. a technique that breed specific animals and plants with desired traits. This technique takes advantage of naturally occurring genetic variation in a group of living things.
16. transgenic plants have been engineered to make their own ___.
17. used to cut DNA into smaller pieces.
18. Plant cells can take in bacteria plasmid by injection or removing the plants outer most organelle, the…
19. many mutations are harmful but sometimes breeders produce useful mutations with this.
21. what is used to increase the rate of mutation.
22. having extra sets of chromosomes.
23. inheritable changes in DNA that allow breeders to increase the variation in a group of organisms.
25. DNA fragments from different sources that become part of the original cell's DNA.
26. transgenic plants that have been engineered to contain this for the improvement of the much needed human health.

Down

1. the risk of inbreeding can cause this.
2. scientists manipulate the DNA molecule in hopes to increase this.
3. a tool used to ensure that the characteristics that make each breed unique will preserved by crossing individuals with similar characteristics.
4. these bacteria have been engineered to produce human proteins like insulin, human growth hormone, and clotting factor.
5. the offspring produced as a result of hybridization that turns out hardier than the parents.
6. small, circular DNA found in bacteria.
7. the organisms often used by breeders that are created to do beneficial things like digesting oil from oil spills.
9. restriction enzymes cuts DNA at specific ___ of nucleotides.
10. engineering a technique used to change an organism's DNA.
11. a technique that separates DNA fragments.
12. a member of a population of genetically identical cells that were produced from a single cell.
13. these types of transgenic organisms have been engineered to improve the food supply.
15. polyploidy is usually this in animals.
20. the organisms that benefit from polyploidy by becoming strong.
24. a tool used by selective breeders that cross different desired traits in hopes to produced the best traits of both parents.

27 of 27 words were placed into the puzzle.