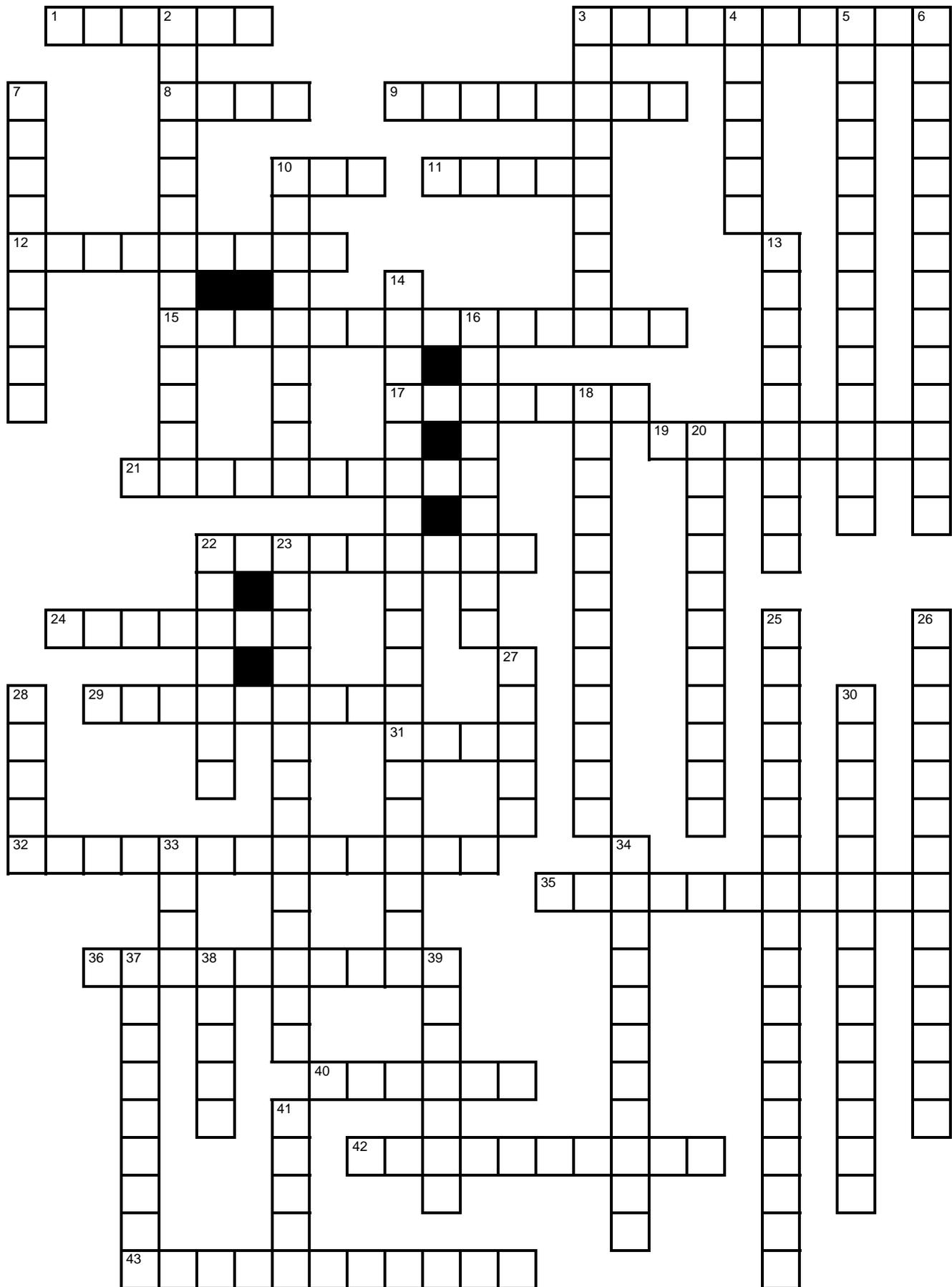


ch 13-14 Genetics



Across

1. Having an extra chromosome is usually a -?- condition.
3. Most of the cloned organism have been rare -?- organism made with recombinant DNA technology.
8. A recessive gene on the X chromosome will be expressed most often in -?-
9. Cells in a girl often have a -?- because the cell deactivates one of the X chromosomes and pushes it to the side.
10. What is a recessive autosomal disease that all babies are checked for immediately after birth?
11. A dominant gene on the X chromosome will be expressed most often in -?-
12. -?- genes are usually on the X chromosome, and cause disorders that are expressed much more often in males.
15. The fancy name for the disorder caused by a dominant gene which results in little people.
17. It is possible but -?- to clone humans today.
19. Bad DNA creates bad -?- that create bad traits.
21. Although -?- can cause problem, it does maintain the desired characteristics in the offspring.
22. Though out history it has been the introduction of random -?- that has provided the source of useful and novel characteristics along with genetic disorders.
24. The good thing about having half your blood cells sickle shaped is that you are less likely to get -?-
29. Lethal genetic disorders are usually -?-, otherwise they would never get passed on to the next generation.
31. A person can -?- without a Y chromosome, but not without an X chromosome.
32. Many traits are the results of an interaction between genetic factors and -?- factors.
35. A normal human egg has -?- chromosomes.
36. Since people who are heterozygous for the sickle cell anemia gene have both round and crescent shaped cells, the normal and the sickle cell gene must be -?-
40. The only real difference between a clone and any other individual is the way the -?- was made.
42. What blood type has the most protein antigens in it?
43. In order to get an egg to accept the replacement DNA scientist use -?- to encourage the cell to fuse and begin mitosis.

Down

2. -?- can produce new types of plants with traits that represent the best of both worlds.
3. There are -?- of genes on your DNA.
4. In a pedigree chart a male is represented by a -?-
5. Down syndrome is most often the result of -?- that occurs during the formation of an egg cell.
6. Approximately 1 out of 30 people is a carrier for the gene that causes -?-
7. A karyotype shows two sex chromosomes and 44 -?-
10. The colors in a pedigree chart represent the -?- of the individuals.
13. A picture of your chromosomes during mitosis.
14. Humans have been able to mold species to our liking through hundred of years of -?-
16. -?- traits cannot be crossed using a Punnett square.
18. The odds of having a Down syndrome child goes up as the -?- of a man goes up.
20. -?- DNA technology has allowed us to create glowing mice.
22. It is important to place -?- on the DNA of transformed organism so that we can tell them apart from the natural species.
23. Bacteria cells suck up DNA from their surroundings in a process know as -?-
25. -?- is used to make DNA fingerprints and to separate DNA pieces based on their sizes.
26. A -?- is produced by analyzing the junk DNA between the genes.
27. The gender of the offspring is determined by which sex chromosome the -?- was carrying.
28. An identical twin born to a different mother at a different time would be a -?-
30. Today the use of DNA analysis has largely replaced the use of -?- to determine an individuals genotype.
33. After completing the HGP people were heard to say, now that we have the book we need to how to -?- it.
34. -?- enzymes are able to cut DNA at specific base sequences.
37. What blood type can give to all other types?
38. Someday soon we may have transgenic pigs that can act as -?- donors for humans.
39. Gene -?- attempts to cure genetic disorders by inserting good DNA into cells of the patient.
41. How many different blood types are there?