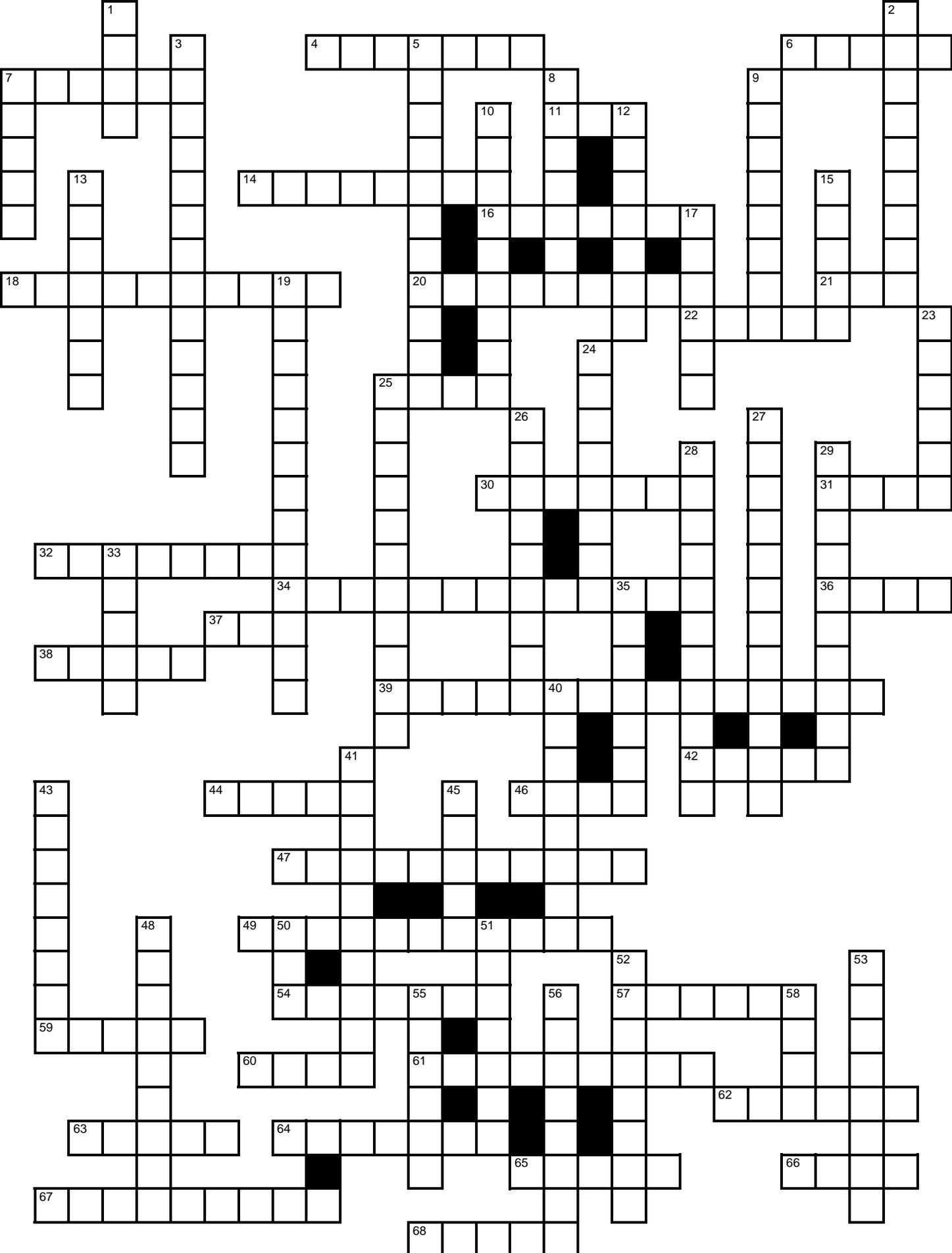


ch-12 DNA



ch-12 DNA

Across

4. What is the outside of a virus made of?
6. A mutation that affects just one base is called a -?- mutation.
7. In Griffith's experiments the colonies of killer bacteria looked -?-
11. What codon codes for methionine?
14. Transcription changes a sequence of DNA bases into a sequence of -?-.
16. What are the radioactive atoms called that scientists can detect with instruments.
18. A condition where a plant has an entire extra set of chromosomes.
20. Chemicals, viruses, and -?- can all cause mutation.
21. What solves the problem of having the instructions for proteins being in one spot, and the construction site in another.
22. Differentiation is accomplished in humans by the control of the expression of -?-
25. A gene is like a -?- in the master plan.
30. What would GATTACA be transcribed into?
31. In Griffith's experiments the bacteria that formed into rough colonies were the -?- bacteria.
32. What is the complimentary base that goes with guanine in a DNA molecule?
34. What enzyme transcribes DNA into RNA.
36. What type of nucleic acid is a ribosome made of?
37. What was transforming the nice bacteria into killer in Griffith's experiments?
38. Who discovered that genes were made of DNA in 1944?
39. The specialization of cells into different tissues is known as -?-
42. What do we call the parts of the DNA that actually code for proteins?
44. The bacteria became radioactive after the virus with tracers on its DNA infected it. true or false
46. The -?- of a virus is made of DNA
47. What is the name of the sugar in DNA?
49. Humans have 46 -?-
54. What amino acid would GGG on the DNA eventually result in after transcription and translation?
57. Since all naturally occurring mutations are -?-, it is very rare for it to be beneficial.
59. In Griffith's experiments a mixture of nice and killer bacteria would probably not harm the mice. true or false
60. What do we call a section of DNA that codes for a protein?
61. Humans have -?- of genes.
62. Unlike DNA, RNA has a -?- base.
63. A deletion of a base in DNA results in a -?- shift mutation that will affect many amino acids.
64. What do we call the parts of the DNA that don't say anything?
65. The first step in replication of DNA is to -?- the DNA molecule.
66. What type of nucleic acid brings amino acids to the ribosomes?
67. RNA is like a -?- of the parts of the master plan.
68. In translation a sequence of -?- becomes a sequence of amino acids.

Down

1. A chromosome is like a -?- in the master plan.
2. What disease did Griffith inject into mice?
3. What amino acid would AAA on the DNA eventually result in after transcription and translation?
5. The anticodons are on the -?-.
7. The time-line on pg 292 is misleading because 1960 to 1977 (17 years) is 3 cm, but 1951 to 1953 (2 years) is about -?- cm.
8. If one side of a DNA molecule had CTAATGT on it, what would the other side have on it?
9. What do we call a change in the base sequence in the DNA?
10. What amino acid would GTA on the DNA eventually result in after transcription and translation?
12. DNA stores and transmits -?- information.
13. Prokaryotic cells do not have a -?- to hold their single strand of DNA
15. Humans have 23 chromosome -?-
17. Unlike DNA, RNA is a -?- strand.
19. What enzyme reads/copies the DNA molecule during replication.
23. What is the name of the sugar in RNA?
24. In bacteria gene expression can be controlled when repressor proteins knot the DNA by attaching to the -?- site on the DNA strand.
25. According to figure 12-18, what is another name for a protein, or chain of amino acids.
26. What amino acid would be coded for by CAG on the RNA molecule?
27. What type of mutation will only affect one amino acid in the resultant protein?
28. What are the monomers used to make DNA?
29. Substitutions, deletions, and -?- are all examples of point mutations.
33. How many bases make a codon?
35. Guanine and -?- are both purines.
40. Where is the mRNA translated?
41. A -?- is a highly coiled DNA molecule visible only during cell division.
43. Who discovered that the amount of C and G are always the same in samples of DNA?
45. A bacteriophage is a -?-
48. What molecular group sits between the sugars in a DNA molecule?
50. What government sponsored project was completed in the year 2000. (acronym)
51. Humans do not have -?-, so our cells can access each gene individually.
52. Who took the x-ray photos of DNA that helped Watson and Crick figure out the structure of DNA?
53. Humans have -?- of bases in their DNA.
55. Usually a mutation of an -?- will not harm a person.
56. What are the protein molecules called that help DNA bundle in Eukaryotic cells?
58. What nucleic acid tells the ribosome which amino acid comes next?