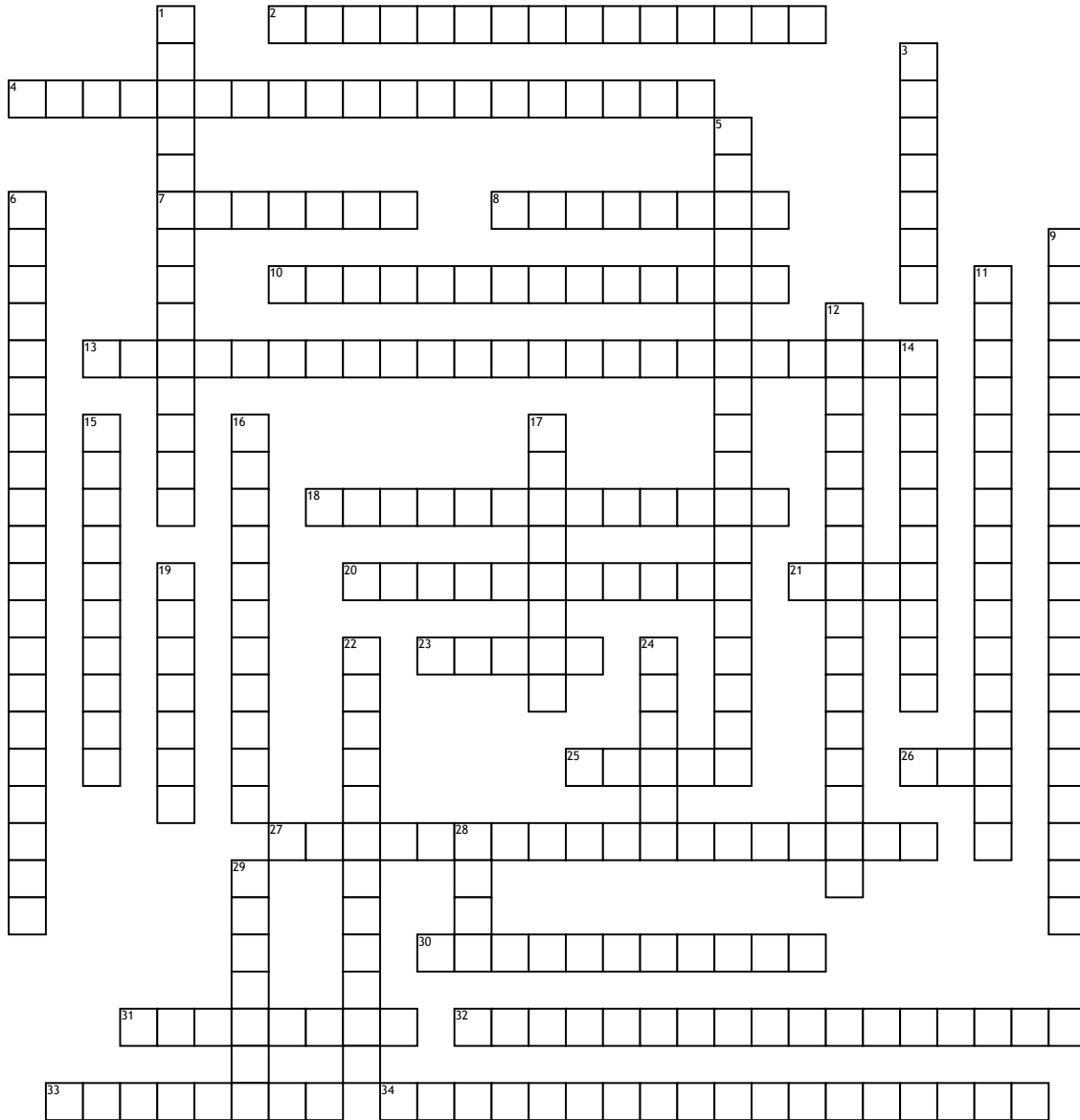


DNA Fingerprinting Crossword



Across

2. process that separates RFLPs according to their length to create a DNA Fingerprint
 4. Small DNA fragments of different lengths; abbreviated as RFLPs
 7. base adenine binds only with
 8. The human genome consists of approximately this many base pairs
 10. The sides of the helix- referred to as the backbone of DNA-
 13. technique that makes thousands of copies of segments of DNA that investigators want to analyze; abbreviated as PCR
 18. The non-coded DNA segments that contain unique patterns of repeated base sequences that that are unique to individuals
 20. Number of chromosomes in each human sex cell (sperm or egg)
 21. Repeating DNA sequences 9 to 80 bases
 23. The United States' Electronic database of DNA profiles
 25. Regions of encoded DNA which contain directions for the body to build molecules
 26. genetic material in our cells
 27. Saliva, blood, semen, skin, hair roots, body tissue cells, and even urine
 30. The type of sugar found in DNA

31. Most lab techniques used for DNA fingerprinting were not intended for forensic science purposes, they instead were designed to be used in what other field?
 32. A technique used by scientists to distinguish between individuals of the same species using only samples of their DNA
 33. Scientist (last name) who invented the process of DNA fingerprinting
 34. "Molecular scissors" that cut DNA at specific locations
Down
 1. avoided to protect collected DNA evidence from DNA damage
 3. Short segments of complimentary DNA that base-pair with the template DNA upstream of the region of interest and serve as recruitment sites for the polymerase during PCR
 5. Repeating DNA sequences that are 2 to 5 bases in length;
 6. DNA
 9. Process of comparing family members' DNA for proof of familial relationships; each
 11. DNA fragments of known lengths; used for comparison purposes during gel electrophoresis
 12. Term for DNA found in the 'Powerhouse' of the cell; is in the form of a circular loop and is inherited only from the mother

14. Term for DNA found in the chromosomes of the nucleus; it is inherited from both the mother and father, and is virtually identical in all cells of an individual's body
 15. Term for evidence capable of identifying a specific person
 16. spiral staircase shape of DNA
 17. Number of chromosomes in each human body cell
 19. Regions of un-encoded DNA that do not code for the production of molecules; often referred to as 'junk DNA'
 22. Another name for DNA fingerprinting
 24. Term for the total amount of DNA in a cell
 28. A small segment of DNA that controls the traits of the organism, and therefore can vary between individuals
 29. The base cytosine binds only with what other nitrogenous base?