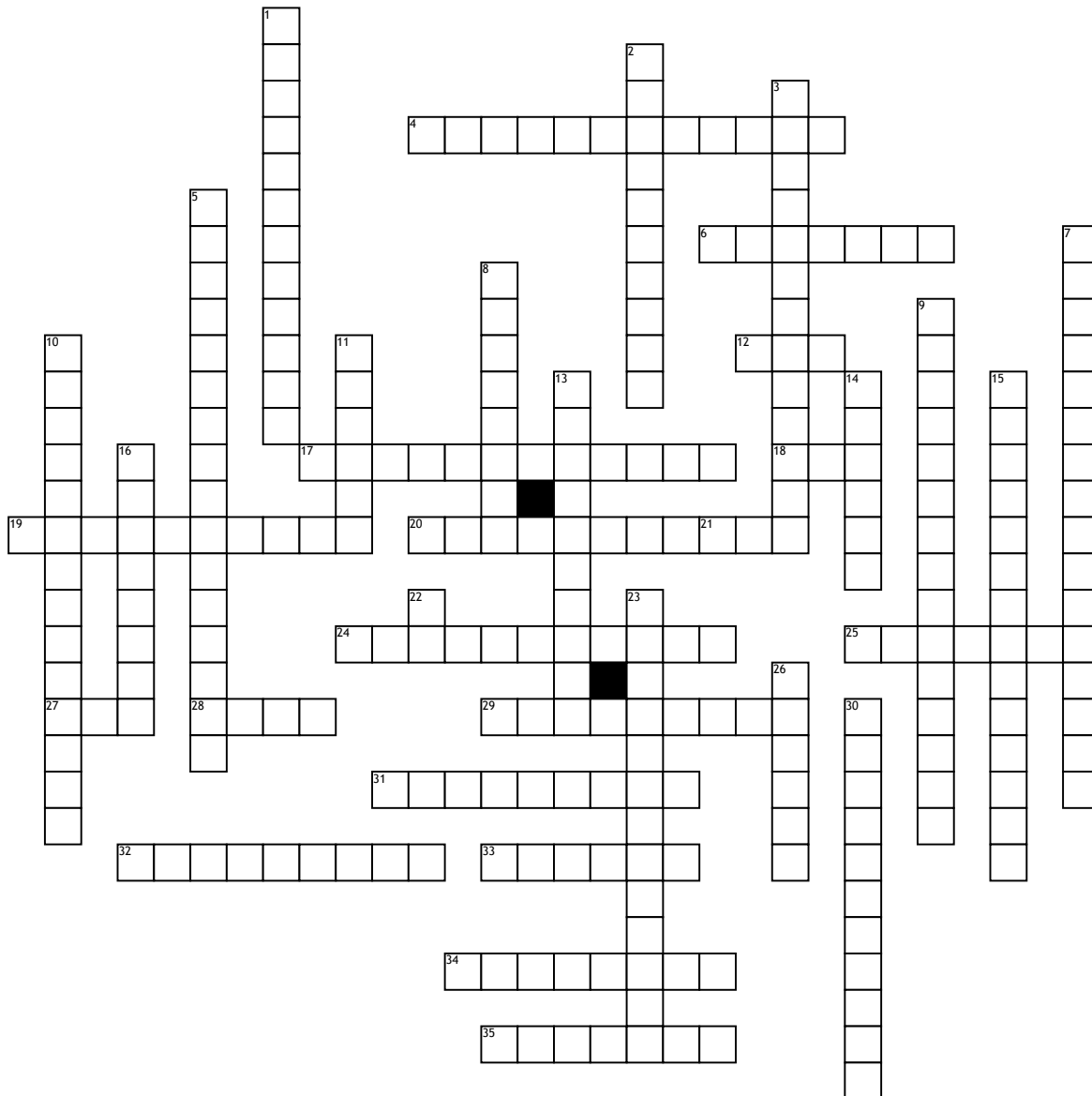


# DNA Structure, Processes, and Discovery



## Across

4. be \_\_\_\_\_.
6. What enzyme makes RNA primers needed to begin replication?
12. What enzyme prevents rewinding during DNA replication?
17. Who proposed the Wobble hypothesis?
18. Start codon.
19. Second step in transcription.
20. Non-template strand of DNA.
24. The sugar present in DNA.
25. The segment of nitrogenous base that is larger and has a double ring structure.
27. The two strands making up the double helix
28. Transports amino acids to ribosomes during translation.
29. The observable characteristics of an organism are called?
31. Where does translation occur?
32. Located on the 3' end of mRNA and protects the mRNA from degradation.

33. A protein that speeds up a chemical reaction is called an \_\_\_\_\_.

34. What enzyme opens the DNA helix during replication?

35. Where does transcription occur?

## Down

1. Type of mutation when a nucleotide base is switched for another.
2. A structure containing many genes and composed of tightly wound DNA.
3. The strand of DNA that is continuously synthesized in the direction of the replication fork.
5. Name of the disconnecting pieces in the lagging strand of DNA?
7. What enzyme adds DNA primers (nucleotides) in the 5'-3' direction, also proofreads the strand?
8. A change made in the DNA sequence is called?
9. What enzyme fixes mistakes made in the synthesis of a new DNA strand only?
10. What enzyme removes the RNA primers and replaces them with DNA?

11. Non-coding region of a gene are called?

13. nitrogenous base?

14. What enzyme seals nicks in the DNA strand, and attaches 5' end of one fragment to 3' end of another?

15. The two people who proposed the structure of the DNA helix.

16. The genetic characteristics of an organism are called?

21. What is composed of a phosphate, sugar, and running in opposite directions so they are said

23. What enzyme relieves stress during DNA replication?

26. Name for the total haploid set of chromosomes in a gamete.

30. The segment of nitrogenous base that is smaller and has a single ring structure.