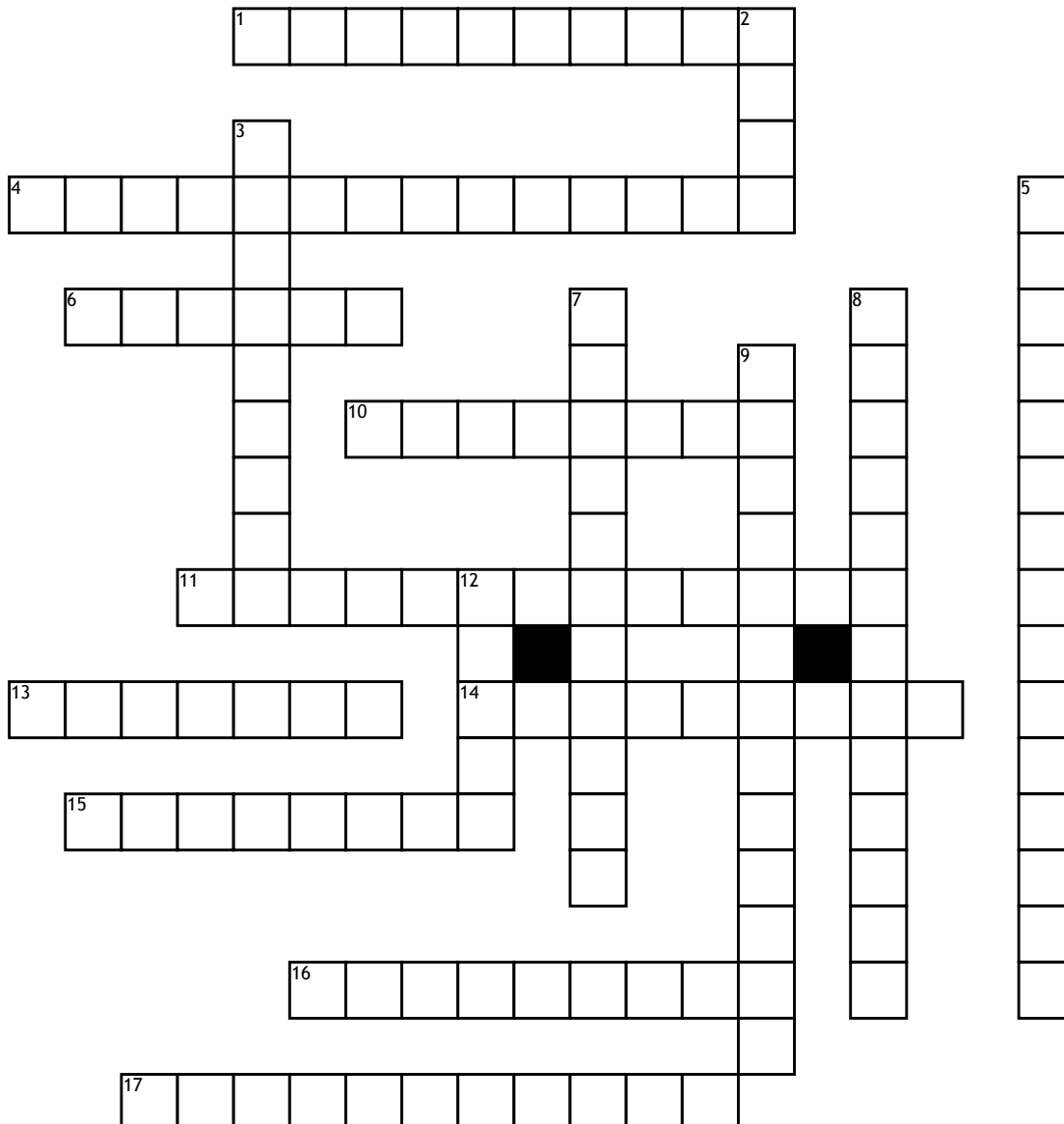


# Transcription, Translation, and Regulation



## Across

1. the building block of a nucleic acid
4. the process by which a DNA molecule is copied
6. a noncoding sequence that is removed from the transcript during RNA processing
10. an enzyme that untwists the double helix of DNA
11. the synthesis of RNA using a DNA template
13. a biologically functional molecule consisting of one or more polypeptides

14. a linking enzyme essential for DNA replication

15. a change in the nucleotide sequence of an organism's DNA
16. a nucleotide triplet at one end of a tRNA molecule that pairs with a complementary codon
17. the synthesis of a polypeptide using the genetic information encoded in mRNA

## Down

2. a sequence that remains in the RNA after RNA processing
3. a protein that inhibits gene transcription

5. y-shaped region on replicating DNA where the parental strands are being unwound

7. a polymer consisting of many nucleotide monomers that serves as a blueprint for proteins
8. a discontinuously synthesized DNA strand that elongates by means of Okazaki fragments
9. the new complementary DNA strand synthesized continuously along the template strand toward the replication fork
12. a three-nucleotide sequence that specifies a particular amino acid