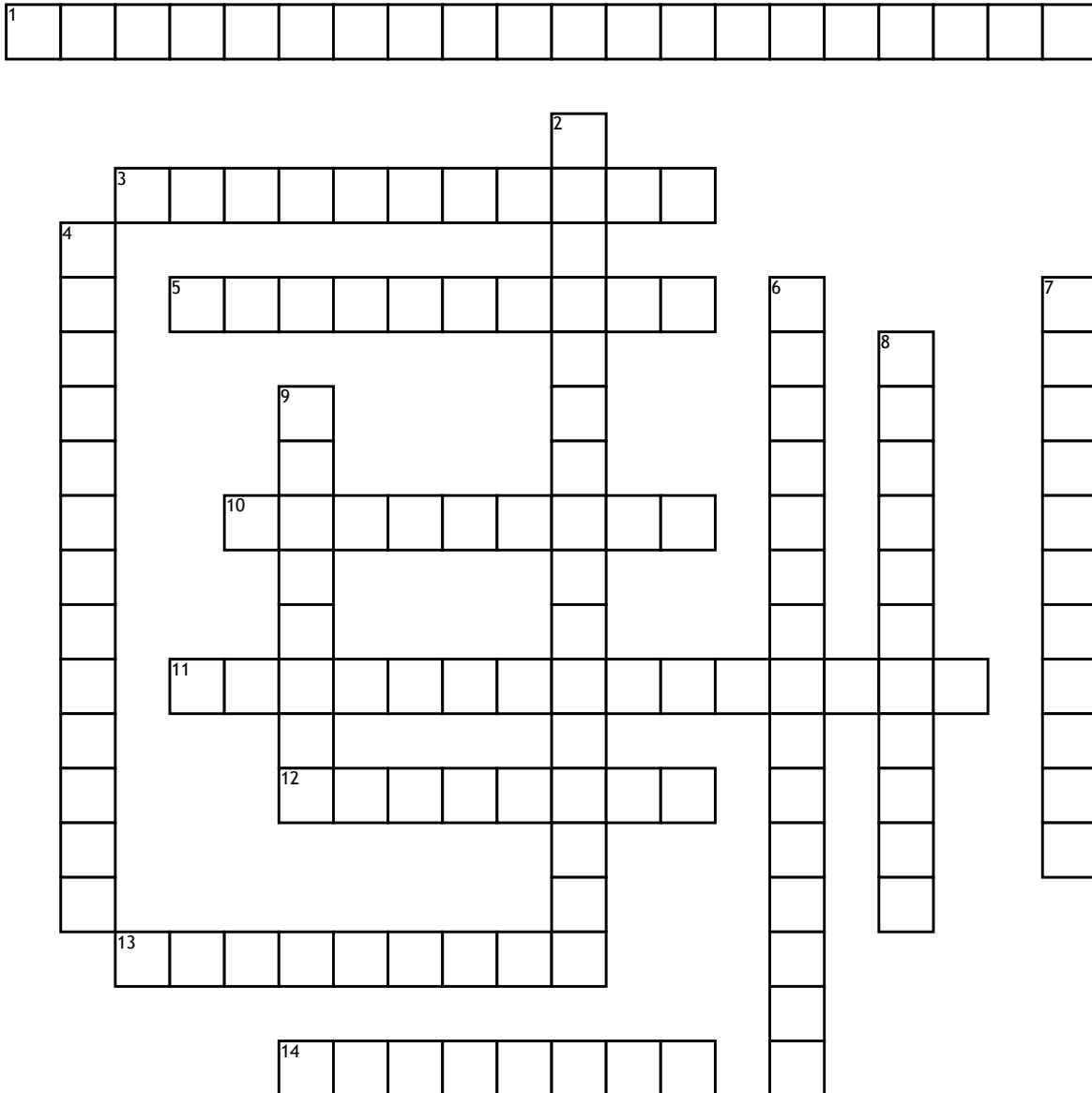


Gene Regulation



Across

1. Bind to DNA and affect transcription of specific genes
3. Promotion of transcription through the addition of acetyl groups to histone tails in order to loosen chromatin structure
5. Stimulates gene transcription
10. Carry multiple control elements far away from the gene being transcribed
11. Transfer of phosphate groups, usually from ATP, to a molecule

12. Increase myacin and make cells thicker and stronger; lipids

13. Random errors in gene replication that alter the sequence of nucleotides

14. Removes introns and joins together exons in RNA transcripts in eukaryotes

Down

2. Barriers that prevent protein synthesis from occurring

4. Range of a single signal increased to many cells

6. Amount of time taken for a cell to be digested by protein

7. Addition of methyl groups to certain DNA bases; associated with reduced transcription

8. Short strands of DNA capable of moving locations within a cell's DNA; jumping genes

9. Total or partial deletion of a gene resulting in the loss of ability to produce mRNA