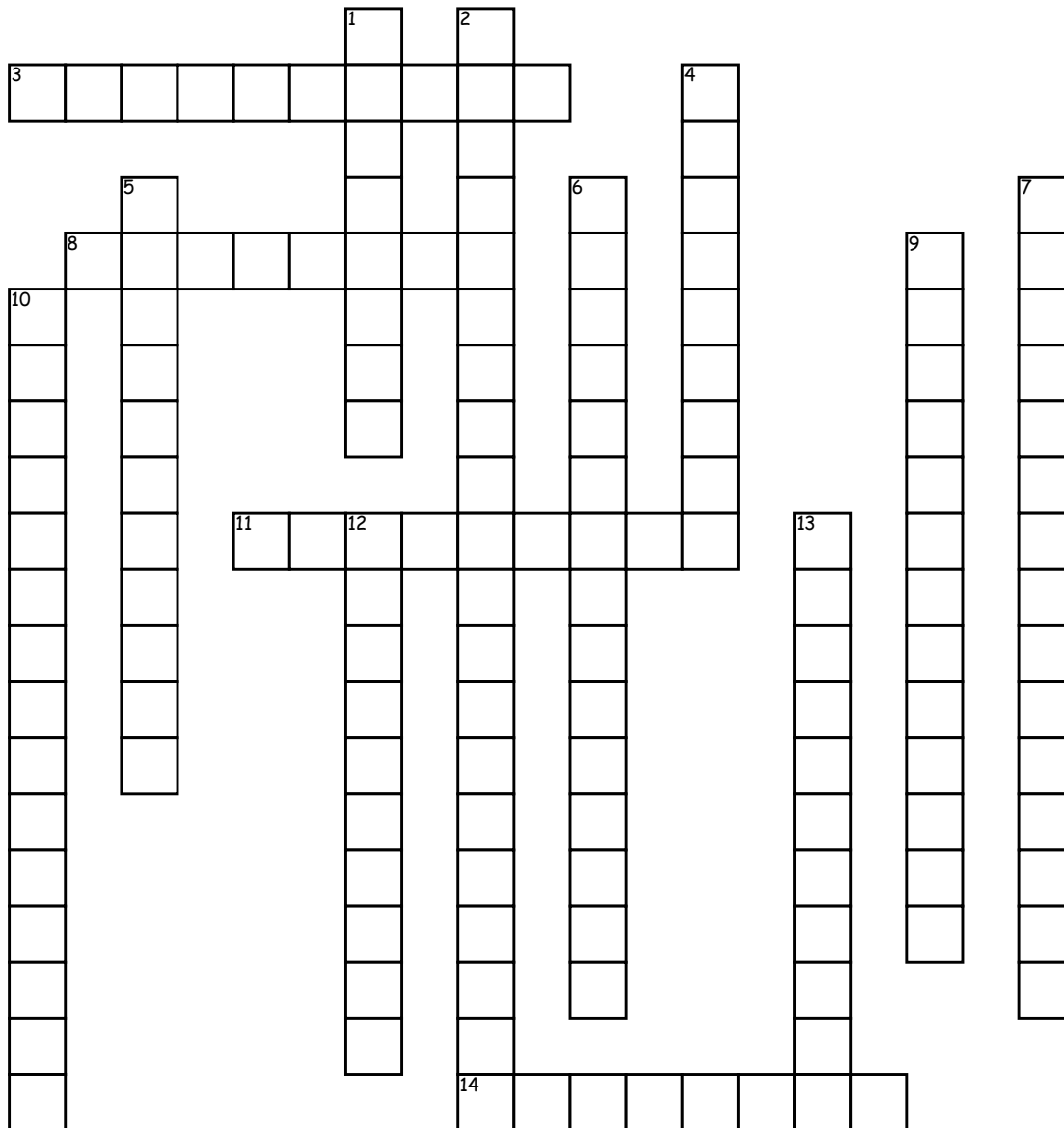


Gene Regulation



Across

3. Transcription factors that bind to DNA and increase the rate of transcription

8. Results in the loss of capability to produce mRNA

11. Source of genetic variety and diversity

14. Often required to create an mRNA molecule to be translated into a protein.

Down

1. Examples include cholesterol, testosterone, and estrogen.

2. Influences binding of RNA polymerase to the promoter region

4. They can found thousands of base pairs away from the starting site.

5. Tightens DNA packaging and reduces gene expression.

6. The process of attaching a phosphate group to a protein, sugar, or other compound.

7. The Reduction of a chemical compound to one that is less complex

9. Increases the range of a single signal

10. A barrier at the replication fork

12. Also known as jumping genes

13. This process opens up the tightly packed nucleosome and allows transcription to occur.