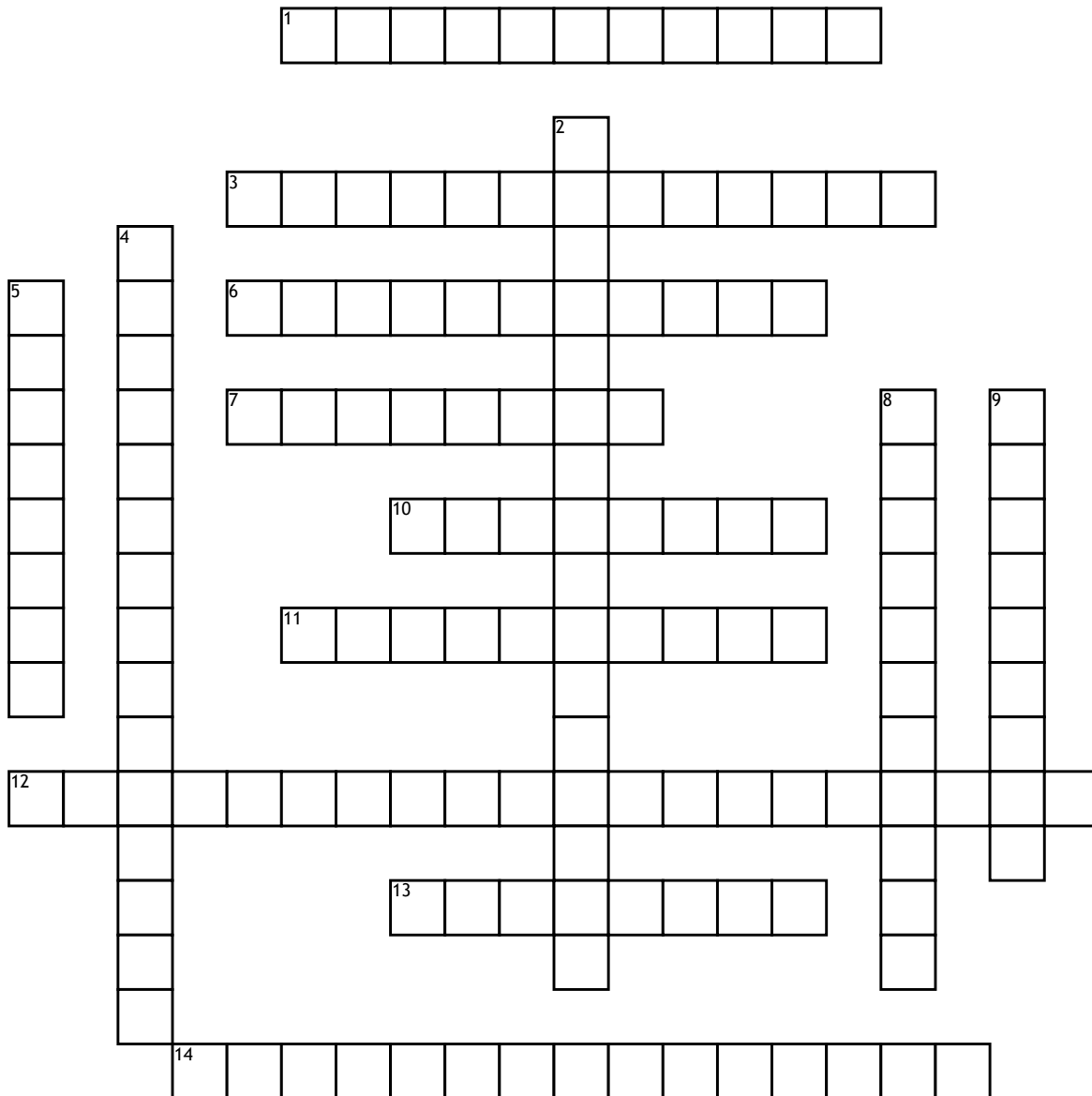


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

# Gene Regulation Crossword Puzzle



## Across

1. Formation of an acetyl derivative/introducing an acetyl group into a compound
3. An increase in the frequency of a gene or chromosomal region, as a result of replicating a DNA segment
6. A chromosomal segment that can undergo transposition and can be translocated into a different area
7. A heritable change in the nucleotide sequence in a gene or a chromosome usually random
10. Gene elimination from differentiating cells
11. A protein that increases gene transcription of a gene or set of genes

12. A protein that controls the rate of transcription of genetic information from DNA to messenger RNA, by binding to a specific DNA sequence

13. A group of synthetic hormones that mimic natural ones usually to enhance bodily processes

14. The amount of time it takes for something to decompose/time it take for the molecules to split off resulting in the degradation of the object

## Down

2. A molecule consisting of two subunits that fit together and work as one to build proteins based off the mRNA sequence

4. The addition of a phosphate group to a protein or other organic molecule

5. The process by which introns are removed to produce mature mRNA that contains only exons

8. The process by which methyl groups are added to the DNA molecule which can silence genes or a group of genes

9. Genetic elements important in the function of a specific promoter and increases the likelihood that transcription of a particular gene will occur