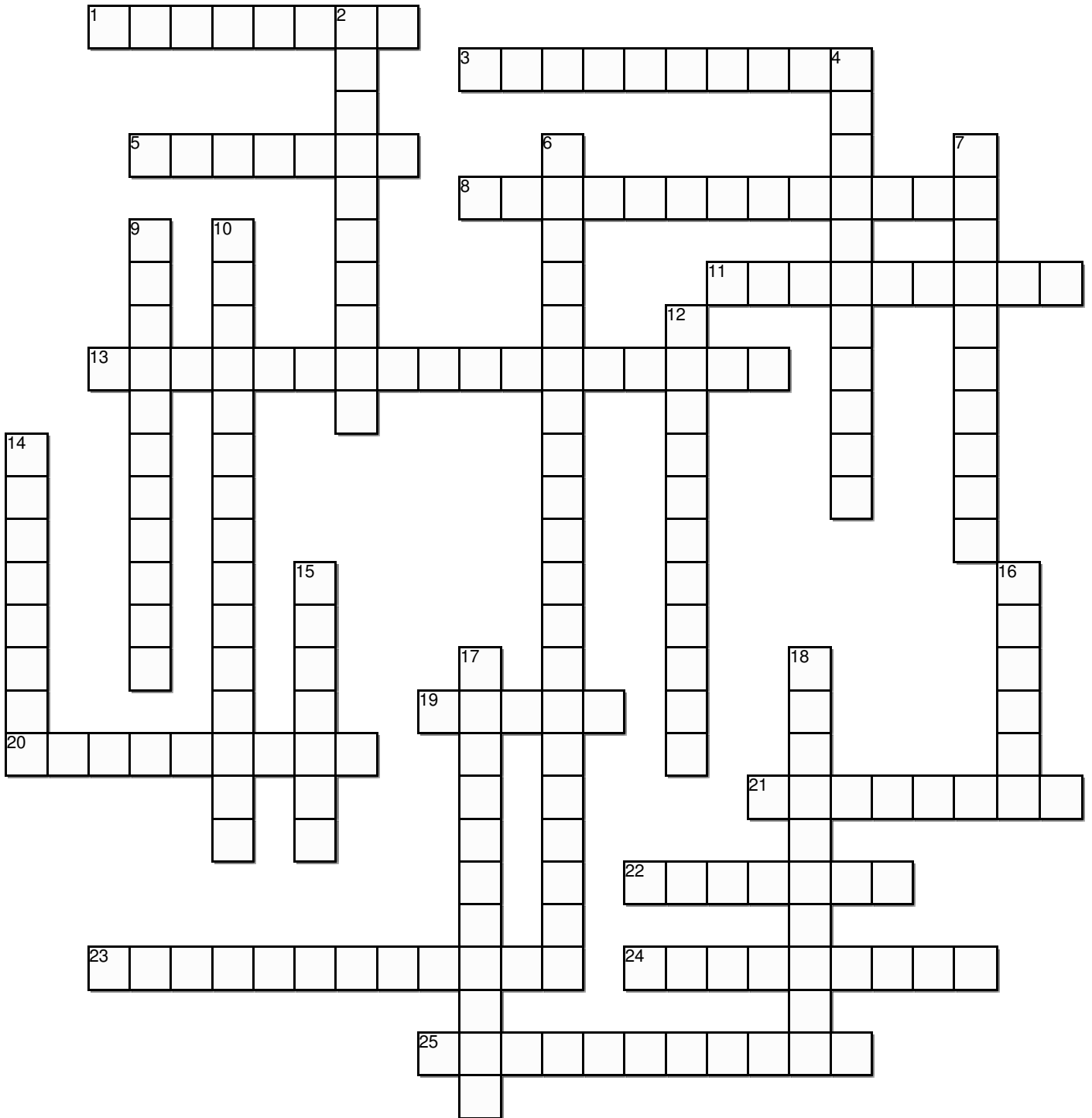


Name: \_\_\_\_\_

# BIO 313 Crossword 1

Complete the crossword below



## **Across**

1. The complementary strand to ACTGATCC
3. Composed of a phosphate, sugar, and base
5. Adenine and Guanine
8. DNA is the genetic material
11. DNA + associated proteins
13. How genetic information is encoded, replicates and expressed
19. Disintegration of a cell by rupture of cell wall or membrane
20. Defined as genetic change through time
21. Macromolecule complex composed of subunits usually proteins that are most often bonded to one another non-covalently
22. cell has two sets of chromosomes
23. the strands of double-stranded (ds) DNA separate when DNA is heated
24. Manifestation of a trait in an organism
25. Provides access to DNA strands

## **Down**

2. similar but not identical copies of genes, arose via duplication of a single ancestral gene
4. Undergoes dynamic packing
6. sites where DNA synthesis (replication) begins; many origins per chromosome
7. attachment site for spindle microtubules via the kinetochore
9. Chromosome with a centromere near the end
10. Very highly condensed, present in centromeres
12. a multisubunit protein complex that assembles on the centromere and then binds spindle microtubules
14. chromosome ends; composed of heterochromatin
15. cell has one complete set of chromosomes
16. alternate form of a gene
17. Cytosine, Thymine and Uracil
18. repeating unit of chromatin