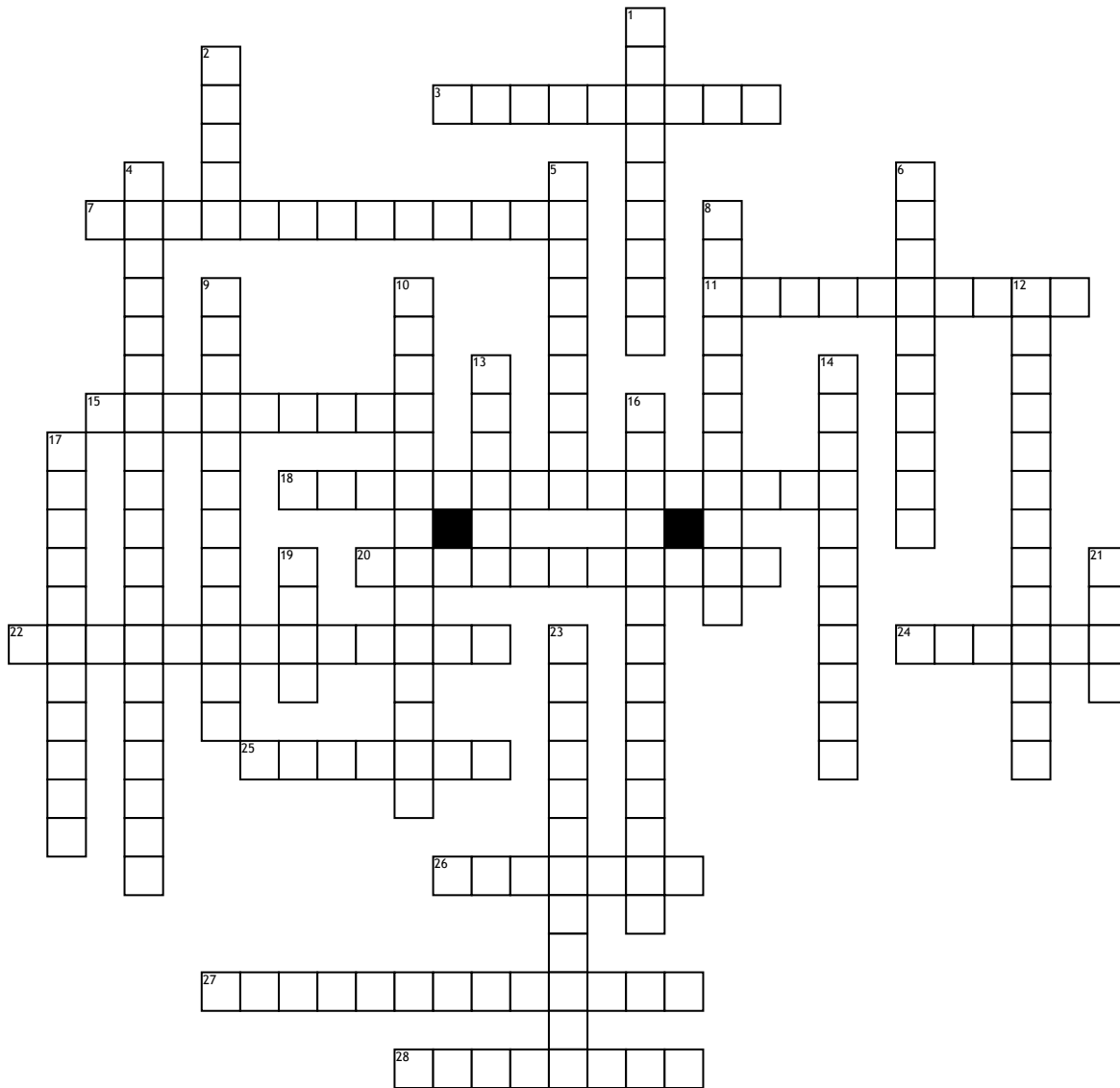# Chapter 12 Vocab

Across

3. Regio of DNA that indicates to an enzyme where to bind to make RNA.

7. Particular segment of DNA is copied into RNA by the enzyme RNA polymerase

11. Condition in which an organism has extra sets of chromosomes.

15. Granular material visible within the nucleus.

18. Process in which cells become specialized in structure and function

20. Decoding of a mRNA message into a polypeptide chain.

22. Virus that infects bacteria.

24. Sequence of DNA that is not involved in coding for a protein.

25. Protein molecule around which DNA is tightly coiled in chromatin

26. Series of genes that controls the differentiation of cells nd tissues in an embryo.

27. Similar to DNA polymerase, binds the DNA and seperates the DNA strands during trascription.

28. Interacts with a regulatory protein that controls the trascription of the operon.

Down

1. Change in DNA sequence that affects genetic information.

2. Three-nucleotide sequence on messanger RNA that codes for a single amino acid.

4. That shifts the reading frame of a genetic message by inserting or deleting a nucleotide.

5. Group of three bases on a tRNA molecule that are complementary to an mRNA codon.

6. Monomer of nuclic acid made up of a 5-carbon sugar.

8. Copying process by which a cell duplicates its DNA.

9. Are made of several dozens of protein.

10. Process in which one strain of bacteria is changed by a gene or genes from another strain of bacteria.

12. Enzyme involved in DNA replication.

13. Group of genes operating together.

14. Type of RNA molecule thath transfers amino acids to ribosomes during protein synthesis.

16. Gene mutation involving changes in one or a few nucleotides.

17. Principle that bonds with DNA.

19. Expressed sequence of DNA; codes for a protein.

21. Sequence of DNA that codes for a protein and thus determines a trait.

23. RNA molecule that carries copies of instructions.