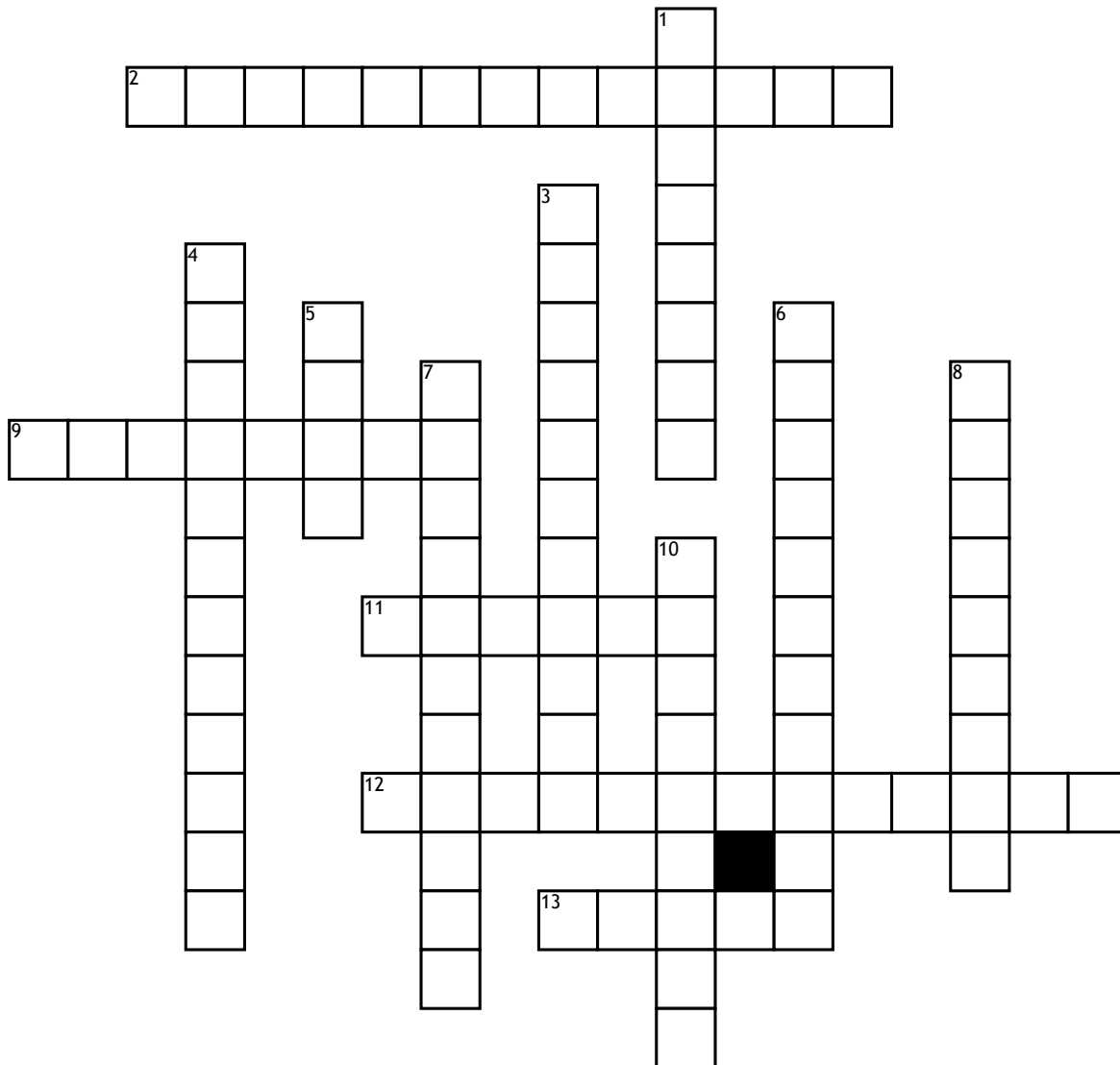


Name: _____

Date: _____

RNA and Protein Synthesis



Across

2. a polymerase that catalyzes the synthesis of RNA

9. the organelle that make proteins and is formed by the nucleus

11. a segment of a DNA or RNA molecule that does not code for proteins and interrupts the sequence of genes.

12. the process by which genetic information represented by a sequence of DNA nucleotides is copied into newly synthesized molecules of RNA, with the DNA serving as a template.

13. a sequence of three nucleotides that together form a unit of genetic code in a DNA or RNA molecule.

Down

1. The promoter region of DNA is found upstream of a particular gene that codes for whichever protein the cell is trying to produce.

3. RNA consisting of folded molecules that transport amino acids from the cytoplasm of a cell to a ribosome.

4. an RNA that is a structural and functional component of ribosomes

5. a segment of a DNA or RNA molecule containing information coding for a protein or peptide sequence

6. In molecular biology and genetics, translation is the process in which ribosomes in a cell's cytoplasm create proteins, following transcription of DNA to RNA in the cell's nucleus

7. the form of RNA in which genetic information transcribed from DNA as a sequence of bases is transferred to a ribosome.

8. a simple organic compound containing both a carboxyl ($-\text{COOH}$) and an amino ($-\text{NH}_2$)

10. a sequence of three nucleotides forming a unit of genetic code in a transfer RNA molecule, corresponding to a complementary codon in messenger RNA.