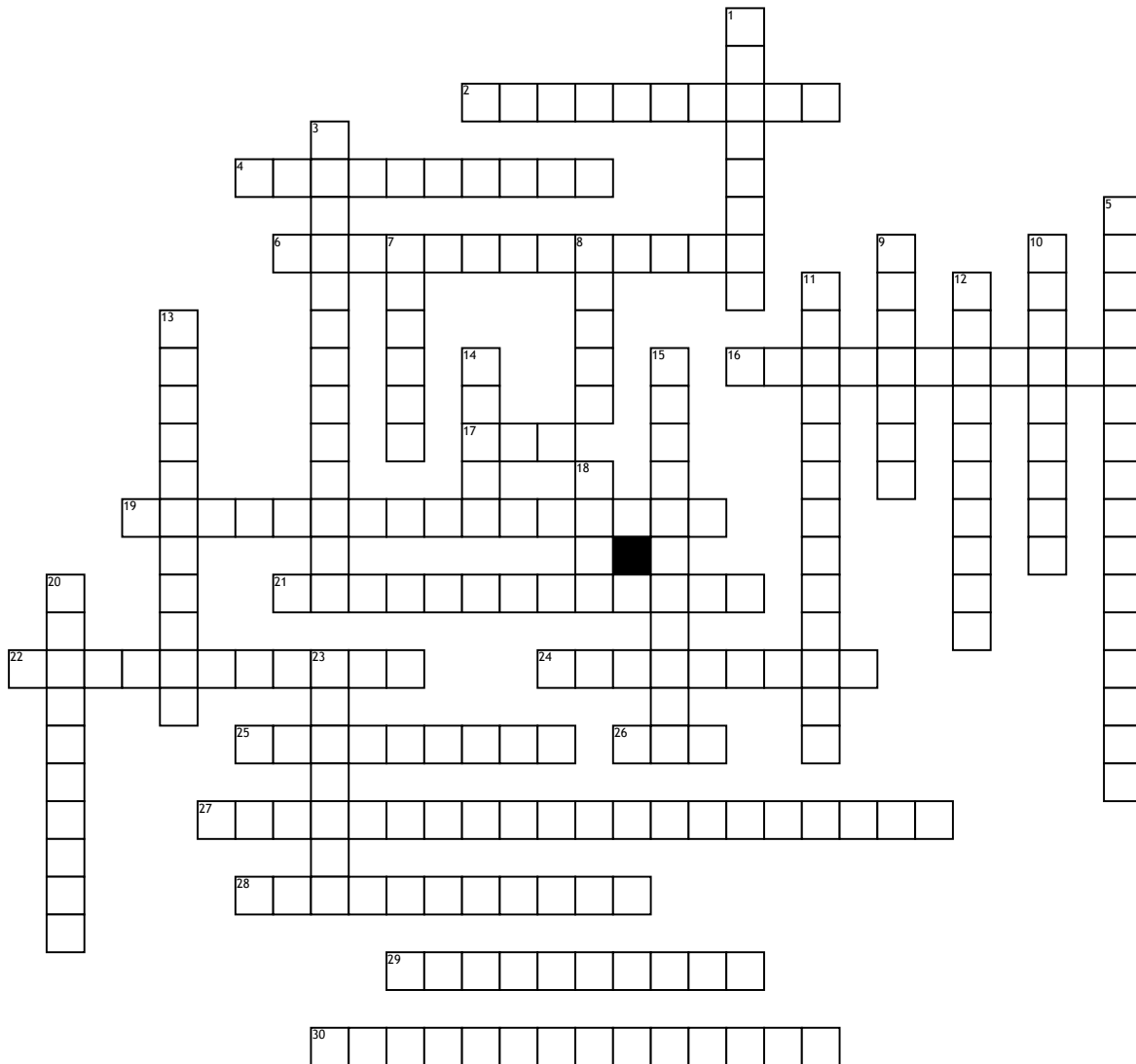


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# The Exploration of Science



## Across

2. term referring to the DNA wrapped up around the histones  
 4. packed, coiled form of DNA for cell division  
 6. enzyme that joins nucleotides to produce strands of DNA and proofreads  
 16. mRNA language, bases read in groups of 3 and determine the amino acid needed  
 17. deoxyribonucleic acid, molecule carrying genetic information that instructs the production of proteins and determines traits  
 19. production of a protein  
 21. enzyme used to copy DNA into mRNA  
 22. second step in protein synthesis, mRNA is "read" by the ribosome and tRNA brings the correct amino acid to create the protein

24. group of 3 bases on tRNA that "check" for accuracy of amino acid by base pairing to codon on mRNA  
 25. change in genetic material  
 26. ribonucleic acid, aides in protein production  
 27. changes in the whole chromosome  
 28. the bonding pattern between the nitrogen bases  
 29. the monomer, building block, that join to build DNA molecule  
 30. type of gene mutation where a change is made at a single point

## Down

1. area of DNA that signals enzyme of where to start copying  
 3. first step in protein synthesis, DNA is copied into mRNA in the nucleus  
 5. two identical copies of a chromosome attached

7. nitrogen base including adenine and guanine  
 8. coded instructions for protein on DNA  
 9. the protein DNA wraps around  
 10. DNA wrapped with protein to shorten and fit into nucleus  
 11. a change in the gene, (base)  
 12. term referring to the DNA wrapped up around the histones  
 13. 5 carbon sugar making up part of the nucleotide  
 14. group of 3 bases on mRNA  
 15. the copying of DNA for cell division  
 18. section of DNA that are coded instructions to make a protein and determines a trait  
 20. nitrogen base including thymine and cytosine  
 23. non-coded instruction for protein on DNA