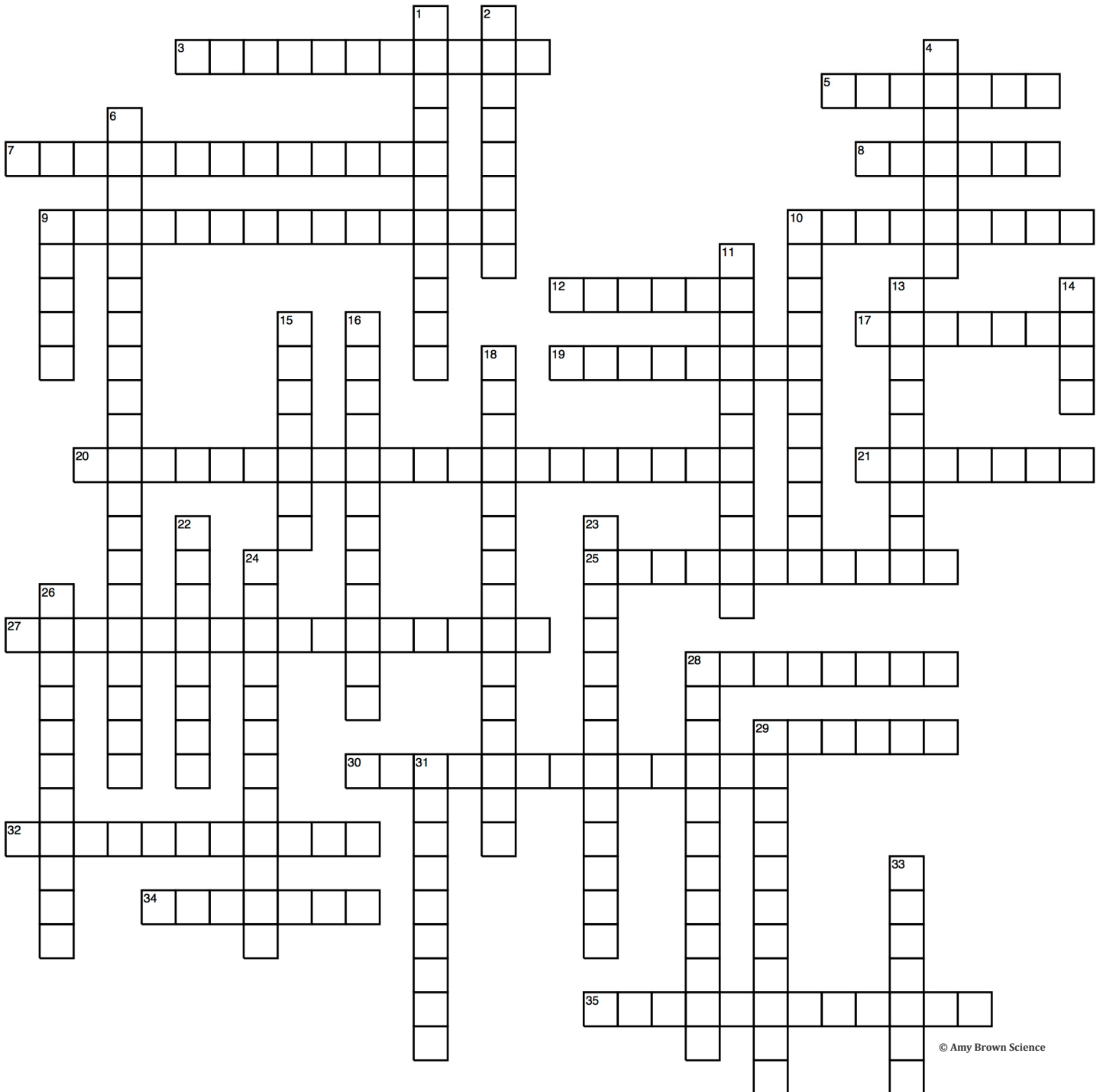




Name _____

DNA and Replication





Clues



- Across
- 3 DNA and RNA are two types of this organic compound. (2 Words)
 - 5 Double-ringed nitrogen bases.
 - 7 The steps or rungs of the DNA "ladder" are formed by _____. (2 Words)
 - 8 This nitrogen base is found in RNA but not in DNA.
 - 9 The sides of the DNA "ladder" are formed by alternating _____ and _____ molecules. (2 Words)
 - 10 Enzymes that cut out damaged sections of DNA.
 - 12 The number of different amino acids.
 - 17 Nitrogen base that always pairs with adenine in strands of DNA.
 - 19 This nitrogen base always pairs with guanine.
 - 20 What does DNA stand for? (2 Words)
 - 21 This nitrogen base is found in DNA but not in RNA.
 - 25 Beadlike structures composed of histones and tightly wound DNA.
 - 27 The X-ray photographs of DNA made by this scientist provided the necessary clues for solving the structure of DNA. (2 Words)
 - 28 This scientist determined that the amount of cytosine is always equal to the amount of guanine in a DNA molecule.
 - 29 Type of sugar found in RNA nucleotides.
 - 30 Enzyme that proofreads newly formed DNA and corrects mistakes if needed. (2 Words)
 - 32 Type of sugar found in DNA.
 - 34 This nitrogen base always pairs with thymine.
 - 35 British scientist who helped solve the structure of DNA. (2 Words)

- Down
- 1 American scientist who helped solve the structure of DNA. (2 Words)
 - 2 Type of protein around which DNA is tightly coiled.
 - 4 Enzymes that seal the free ends of new DNA to the existing strand of DNA.
 - 6 Various places along the DNA molecule where the copying of the DNA molecule begins. (3 Words)
 - 9 One of three parts to a nucleotide.
 - 10 These are the subunits that compose both DNA and RNA.
 - 11 Single-ringed nitrogen bases.
 - 13 One of three parts to a nucleotide.
 - 14 A small segment of DNA that contains the information for building a protein.
 - 15 Nitrogen base that always pairs with cytosine.
 - 16 One of three parts to a nucleotide. (2 Words)
 - 18 A "Y" shaped region at the end of a replication bubble where new strands of DNA are being formed. (2 Words)
 - 22 Enzyme needed to separate the strands of DNA during replication.
 - 23 This enzyme inserts new nucleotides to form a duplicate strand of DNA. (2 Words)
 - 24 The attraction that exists between two nitrogen bases across the center of the DNA helix. (2 Words)
 - 26 Term used to describe the spiraling nature of the DNA molecule. (2 Words)
 - 28 This type of chemical bond holds the components of a nucleotide together. (2 Words)
 - 29 The process by which an exact copy of a DNA molecule is formed.
 - 31 If the nucleotide sequence on one side of the DNA molecule is TAG CCA TTA, what would be found on the complimentary side?
 - 33 In RNA, uracil always pairs with which base?