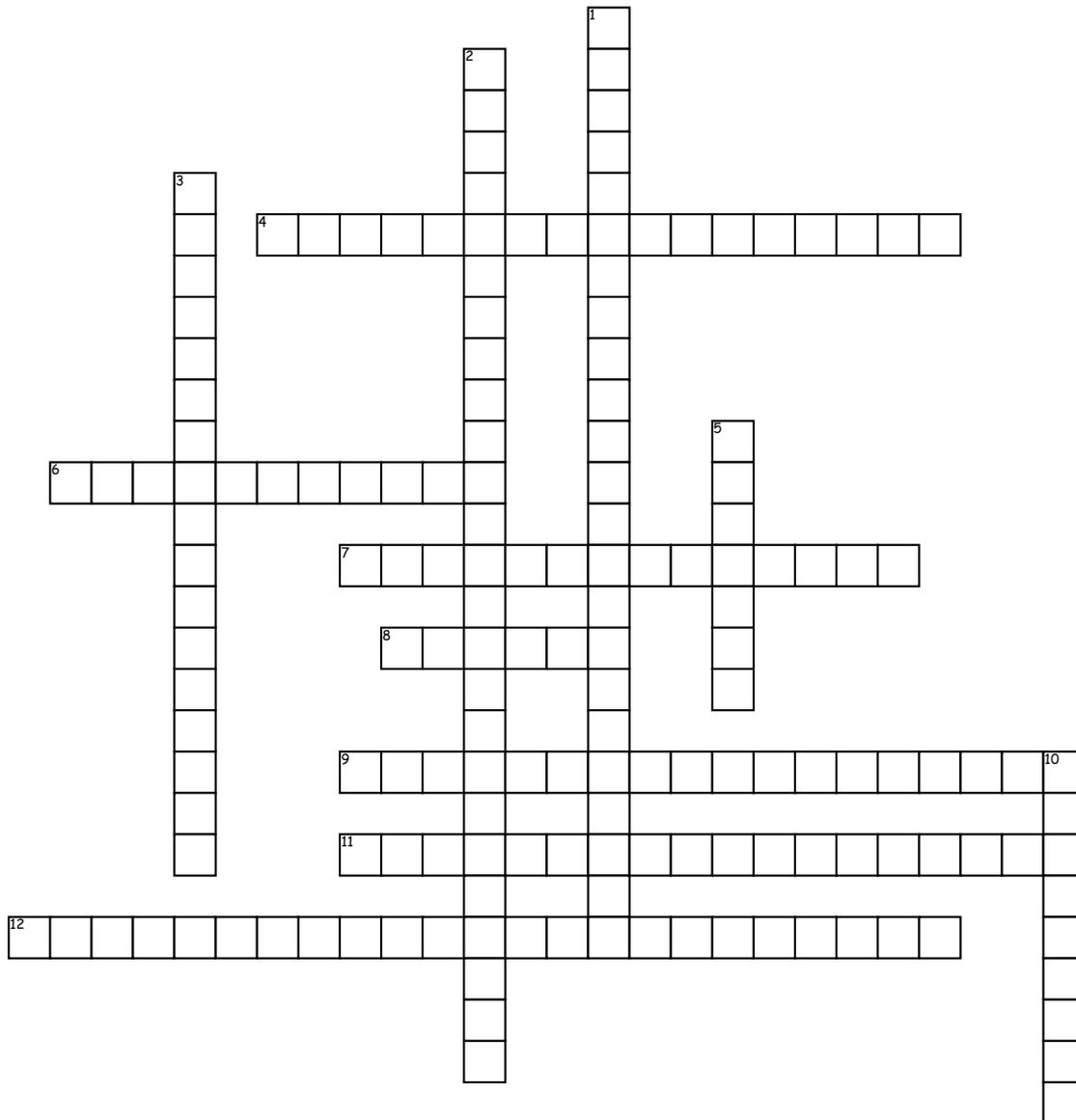


DNA TECHNOLOGY



Across

4. The intentional breeding of organisms with desirable trait in an attempt to produce offspring with similar desirable characteristics or with improved traits. Supplement.

6. the transplantation of normal genes into cells in place of missing or defective ones in order to correct genetic disorders.

7. DNA that has been formed artificially by combining constituents from different organisms.

8. is a family of DNA sequences found within the genomes of prokaryotic organisms. These sequences are derived from DNA fragments from viruses that have previously infected the prokaryote and are used to detect and destroy DNA from similar viruses during subsequent infections.

9. is a laboratory method used to separate mixtures of DNA, RNA, or proteins according to molecular size

11. is a protein produced by bacteria that cleaves DNA at specific sites. Bacteria uses this to defend against bacterial viruses called bacteriophages/ phage.

12. is a protein composed of 238 amino acid residues that exhibits bright green fluorescence when exposed to light in the blue to ultraviolet range.

Down

1. is a method widely used in molecular biology to make many copies of a specific DNA segment. Using PCR, a single copy of a DNA sequence is exponentially amplified to generate thousands to millions of more copies of that particular DNA segment.

2. s any organism whose genetic material has been altered using genetic engineering techniques.

3. a technique used especially for identification by extracting and identifying the base-pair pattern of an individual's DNA

5. is the process of producing genetically identical individuals of an organism either naturally or artificially. In nature, many organisms produce clones through asexual reproduction.

10. cells with the potential to develop into many different types of cells in the body. They serve as a repair system for the body