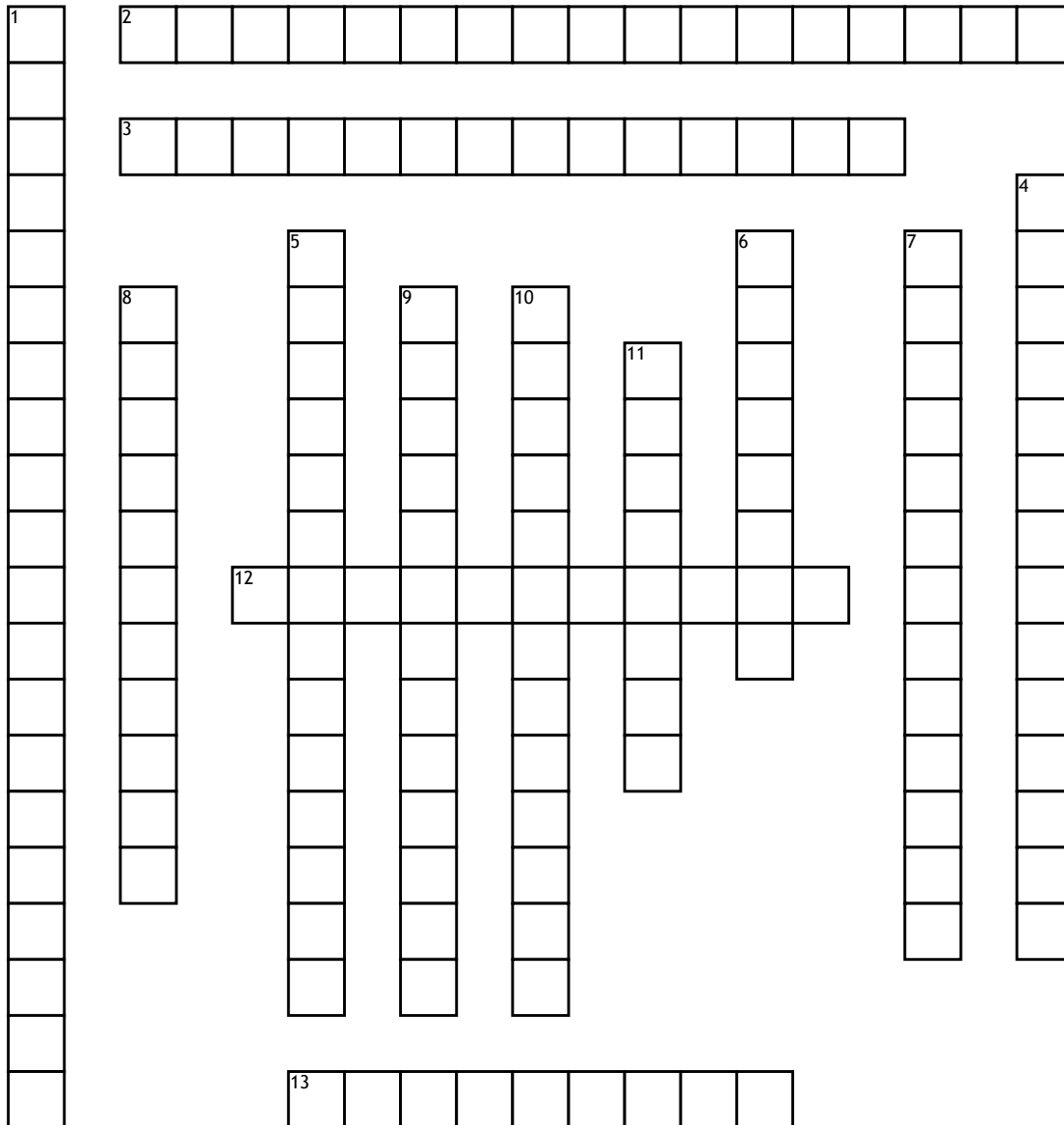


# Mutations



## Across

2. Occur in the organism's gametes and can be passed on to the offspring.

3. A chromosome fails to separate from its homologue during meiosis and one gamete receives an extra copy of the chromosome.

12. A segment of the chromosome that doubles.

13. Where a chromosome segment breaks off and flips backwards

## Down

1. Take place in an organism's body cells and can therefore affect the organism.

4. The addition or removal of a single nucleotide.

5. Mutations that cause death. Often before birth.

6. Is the loss of a piece of chromosome due to breakage

7. Is the process of creating cell patterns in a layer-by-layer method to deposit materials known as bioprint to create tissue-like structures that are later used in medical and tissue engineering fields.

8. Is where a healthy copy of a gene is placed into the cell that is defective.

9. Where one piece of the chromosome breaks off and reattaches to a nonhomologous chromosome.

10. Where a physician removes amniotic fluid from the amnion.

11. A change in the nucleotide base sequence of a gene or DNA molecule