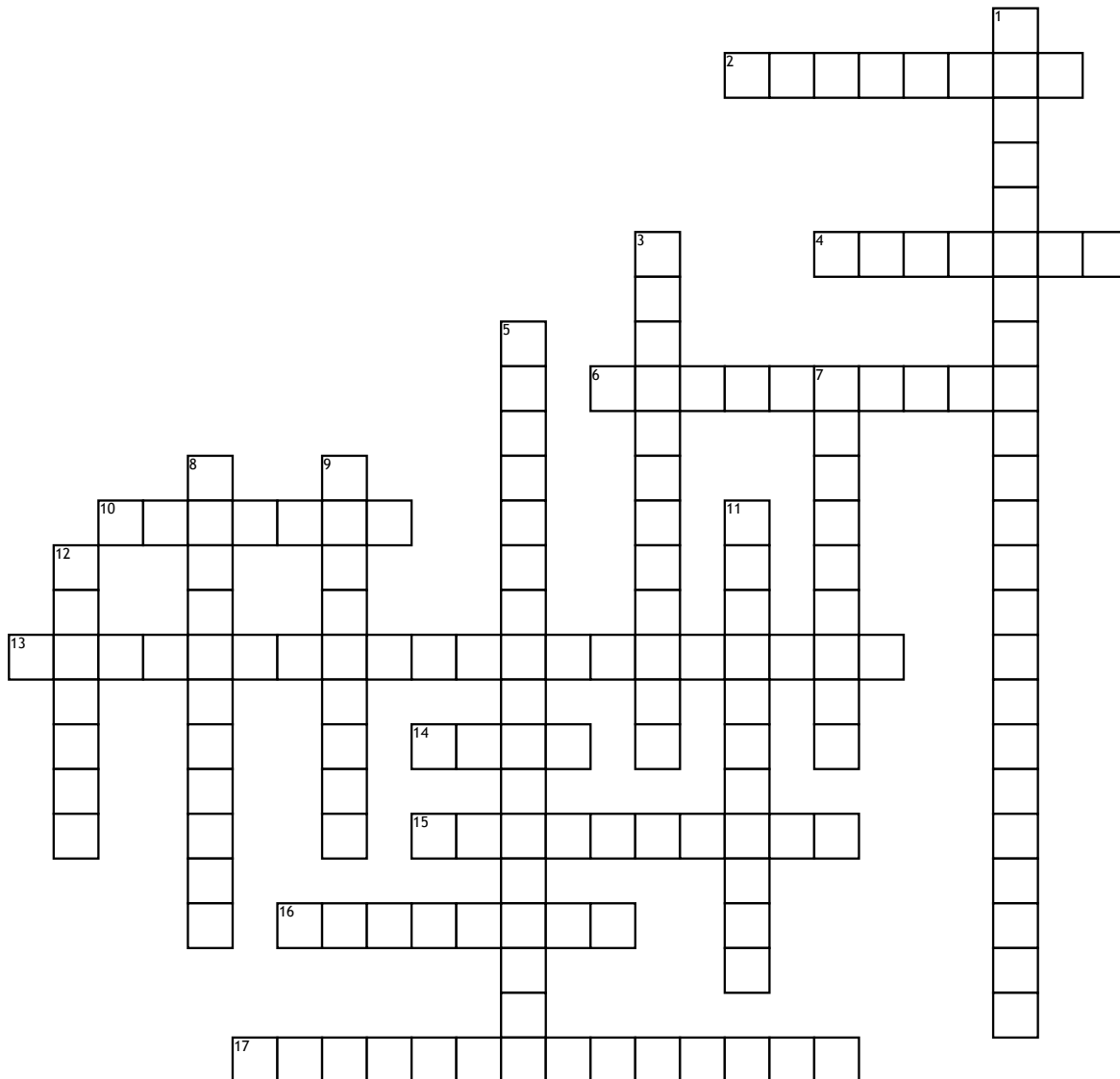


# Enzymes



## Across

2. Nonprotein substance needed by an enzyme for normal activity.

4. Catalysts that accelerates a specific chemical reaction, usually a protein.

6. When activation site of the enzyme conforms to fit and binds to its substrate is known as \_\_\_\_\_.

10. Enzymes \_\_\_\_\_ reactions.

13. Substance that binds to the active site of an enzyme resulting in a decrease in the rate of the reaction catalyzed by the enzyme.

14. ES complex forms when active site and substrate \_\_\_\_\_.

15. Deviation from optimal conditions can result in \_\_\_\_\_ the enzyme.

16. Organic cofactor is known as a \_\_\_\_\_.

17. Enzymes are \_\_\_\_\_.

## Down

1. Binds to enzyme at a site other than the active site, changing the shape of the enzyme.

3. Coenzymes help in the reaction by \_\_\_\_\_ electrons or part of a substrate molecule.

5. Needed to start a chemical reaction and the amount required can be reduced by enzymes.

7. NADH, NADPH, and FADH<sub>2</sub> are coenzymes that transfer \_\_\_\_\_.

8. Enzymes generally work best under appropriate \_\_\_\_\_, pH, and ion concentration.

9. Substance on which an enzyme acts

11. Enzymes contain one or more \_\_\_\_\_ which the substrate binds.

12. When the enzyme-substrate complex breaks apart, the \_\_\_\_\_ is released.