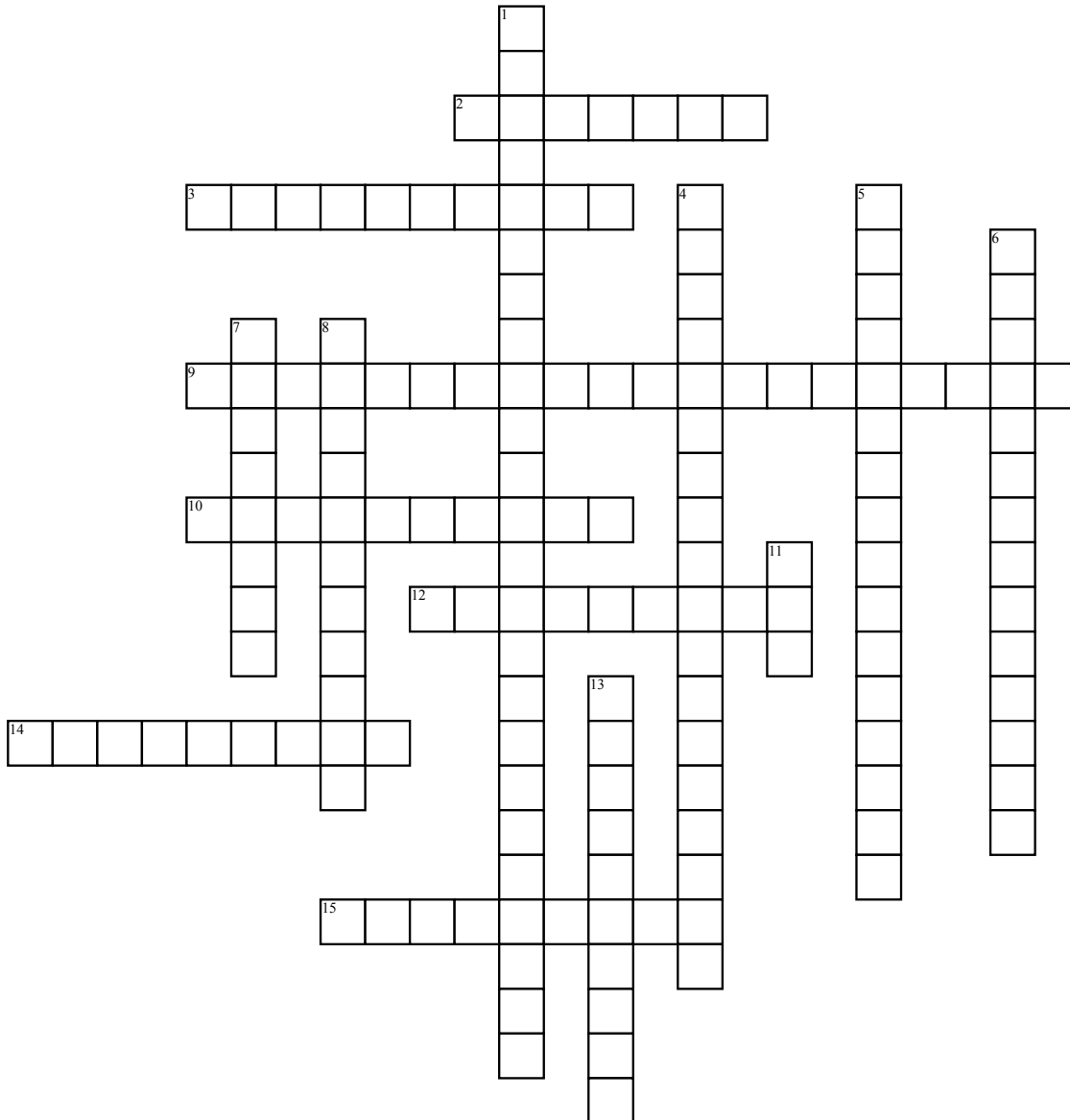


Name: _____

Date: _____

Enzymes



Across

2. biologically active catalysts that facilitate chemical changes in the human body by decreasing the activation energy of chemical changes
3. substances that bind to an enzyme and turn it off, thus preventing it from catalyzing the reaction
9. a substance that resembles the substrate and binds with the active site of the enzyme, thus interfering and preventing the substrate from binding. The amount of substrate relative to the amount of competitive inhibitor determines the degree of inhibition
10. the depressed or grooved region in an enzyme
12. organic cofactors
14. substances that accelerate or promote chemical reactions

15. the active site accommodates the

Down

1. a substance that does not resemble the substrate and inhibits enzymes by binding to a site on the enzyme other than the active site and thus changing the shape of the active site. This type of inhibition is not influenced by the concentration of substrate. Also known as allosteric inhibitors.
4. a structure composed of enzymes physically linked to convert a substrate to a final product
5. involves numerous enzymes that subsequently convert a substrate to a final product. The product of one enzyme is the substrate for the next enzyme in the pathway
6. the place where most noncompetitive enzymes bind

7. a nonprotein structure that may be either an inorganic or organic substance associated with a particular enzyme or enzyme reaction
8. when the shape of the active site permits only a single substrate or type of substrate
11. The given name of an enzyme is usually based upon the substrate name and the suffix
13. occurs when so much substrate is present that all enzyme molecules are engaged in chemical reactions, resulting in no further increase in reaction rate