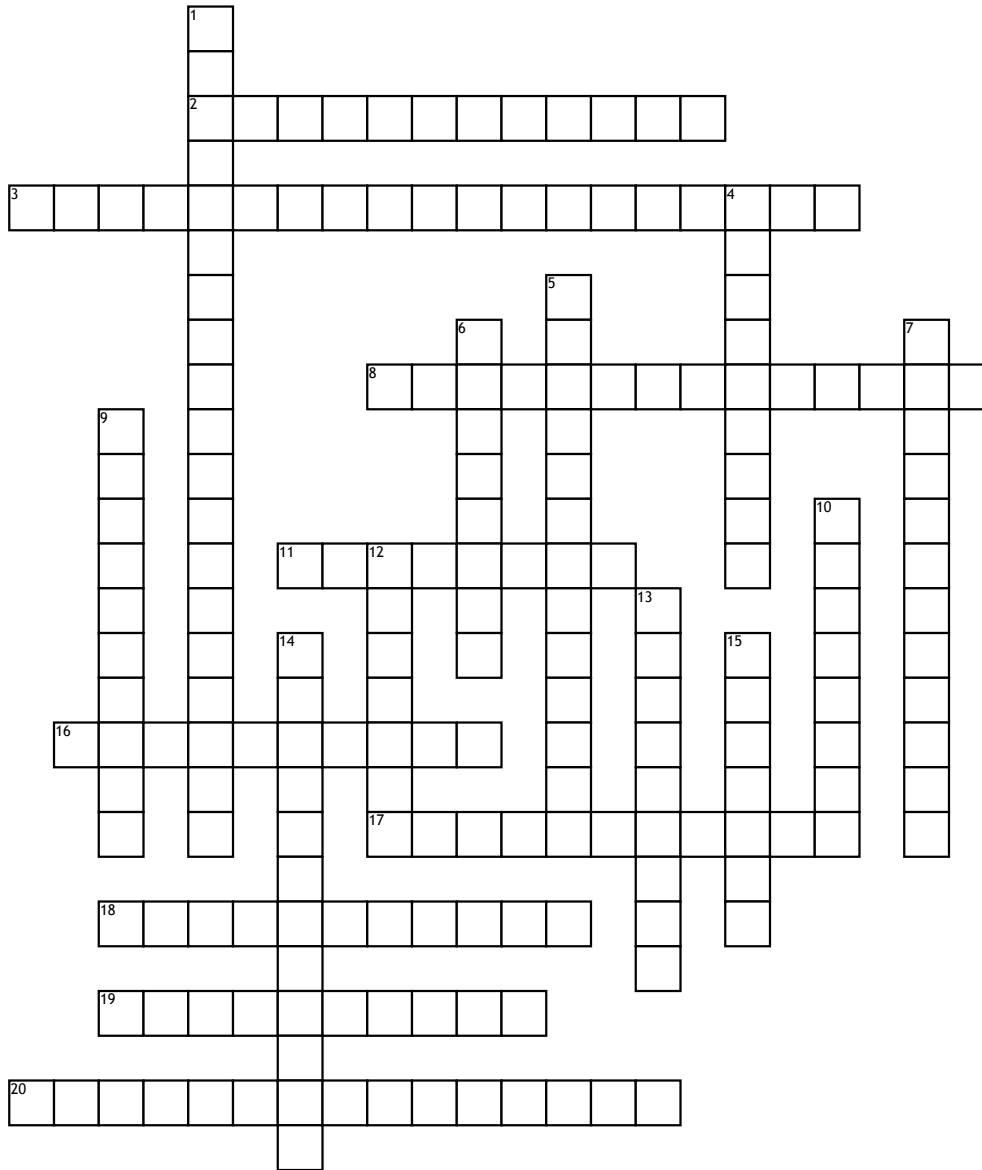


Name: \_\_\_\_\_

# Carbohydrate Metabolism



## Across

2. Citric acid cycle is depended on acetyl-coA and \_\_\_\_\_
3. Pyruvate kinase phosphorylates \_\_\_\_\_ to form ATP and pyruvate
8. A process whereby polymer of glucose stored in the body are broken down
11. Hormone that regulates gluconeogenesis
16. Nutrients or cell constituents are broken down to salvage components or generate energy
17. Fight or flight hormone being released into the bloodstream by adrenal glands in response to stress
18. Only liver cells contain this enzyme that transfers phosphoryl groups and is primarily involved in maintaining blood glucose level

19. Enzymes are regulated by effectors to control the pathways are known as \_\_\_\_\_

20. Synthesis of glucose from non-carbohydrate precursors

## Down

1. Enzyme that phosphorylates F6P to F1,6bP
4. Biomolecules are synthesized from simpler components
5. Glycogen \_\_\_\_\_ is inactivated when glycogen synthase is activated
6. Lactate dehydrogenase inter-converts lactate and \_\_\_\_\_ (product of glycolysis)
7. Location where ATP is formed from electron carriers in the cell
9. Enzyme that catalyzes the formation of G6P

10. What is the effect of 2,3-BPG binding to deoxyhemoglobin in oxygen affinity?

12. Formation of glycogen requires a \_\_\_\_\_ diphosphate glucose
13. Linking branches of alpha 1,4 to alpha 1,6 requires \_\_\_\_\_ enzyme
14. Name the bond that links the 3 phosphoryl groups in ATP
15. An amino acid that joins gluconeogenesis process via pyruvate