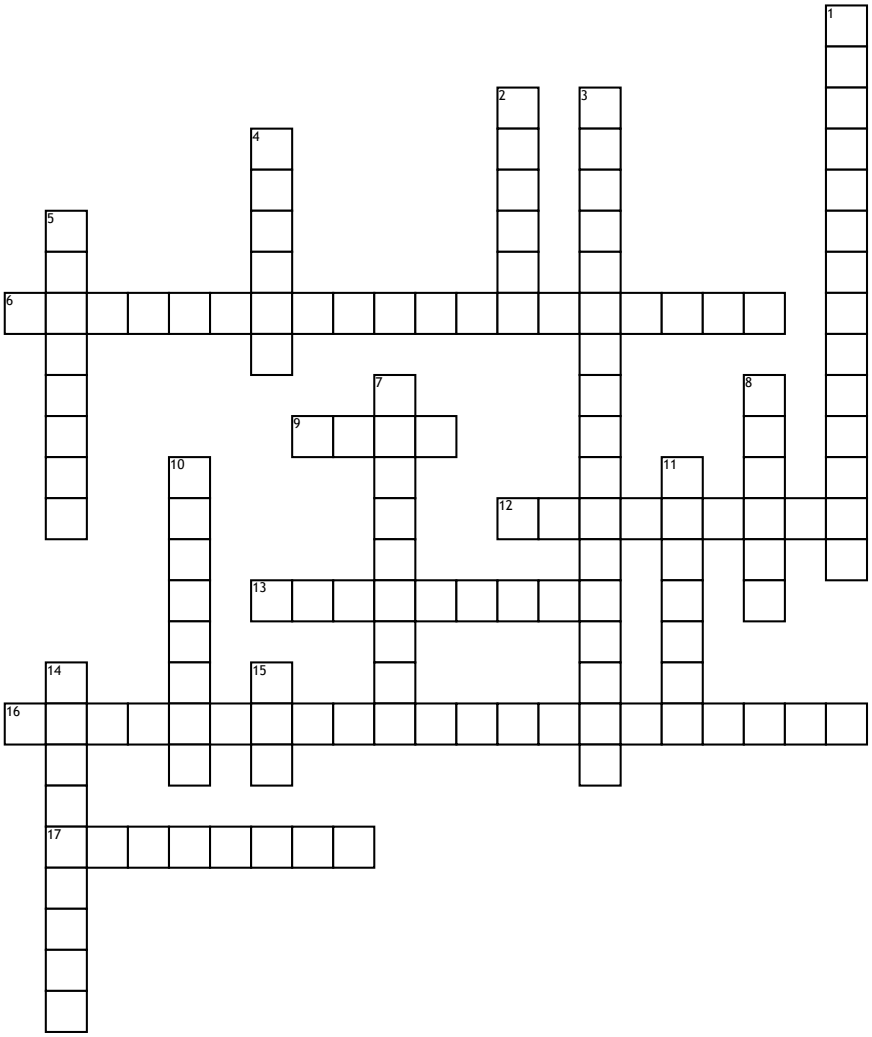
Name: _____ Date: _____

Pyruvate Oxidation:Anna C and Courtney Q



Across

6. Pyruvate Oxidation occurs in the ____ ____.
9. A byproduct of 2 _____ are made from this process and are later used in the citric acid cycle.
12. What type of vitamin do you need in order to make Acetyl-CoA?
13. Coenzyme that helps attach Acetyl and facilitates oxidation.
16. A mitochondrial enzyme responsible for regulating the conversion of pyruvate to Acetyl-CoA.
17. This is carried into the matrix by Mitochondrial Pyruvate Carriers.

Down

1. Enzyme activated by an increase in Ca2+ and Mg2+ which removes a phosphate
2. This is a tiny, two-carbon molecule.
3. What is the third step in the breakdown of carbohydrates known as?
4. Acetyl is formed from pyruvate by removing a ____.
5. Once pyruvate is _____ to form acetyl CoA it cannot be converted back to glucose.
7. Enzyme activated by an increase in pyruvate and a decrease in ATP that adds a phosphate.
8. When you start to exercise, what form of pyruvate dehydrogenase(PDH) do you want?
10. What form do you want PDH kinase in during exercise?
11. Pyruvate can either be directly oxidized or turned into _____.
14. Glycolysis occurs in the _____.
15. NADH is later used to help create ____ for energy use.

Word Bank

Pyruvate	Coenzyme A	Oxidized	B Vitamins
Acetyl	Pyruvate Oxidation	Lactate	PDH Kinase
Pyruvate Dehydrogenase	NADH	PDH Phosphatase	Active
Carbon	Mitochondrial Matrix	Inactive	Cytoplasm
ATP			