NAME:_____ Quiz 12

1. Draw α-D-fructose.

2. Draw pyruvate.

3. How many total (all together) C-C and C-H bonds are present in fructose?

4. How many total (all together) C-C and C-H bonds are present in **two** pyruvate molecules?

5. What is the numerical difference between your answers for #3 and #4?

6. How many redox reactions occur in the pathway of glucose becoming two pyruvate molecules in myocytes?

7. Identify the enzymes that catalyze the redox steps in myocytes.

Fed (Cardiac Myocyte)	Increasing	Decreasing	N/A
Blood glucose			
Blood [Insulin]			
Insulin Receptor Signal			
Blood [Glucagon]			
Glucagon Receptor Signal			
[cAMP]			
Flux through GLUT2			
Flux through GLUT4			
Regulated Enzyme Phosphorylation Level			
Flux through glycolysis			
[Fructose-2,6-bisphosphate]			
Activity of Phosphofructokinase-2			
Activity of Fructose-2,6-bisphosphatase			

NAME:_____ Quiz 12