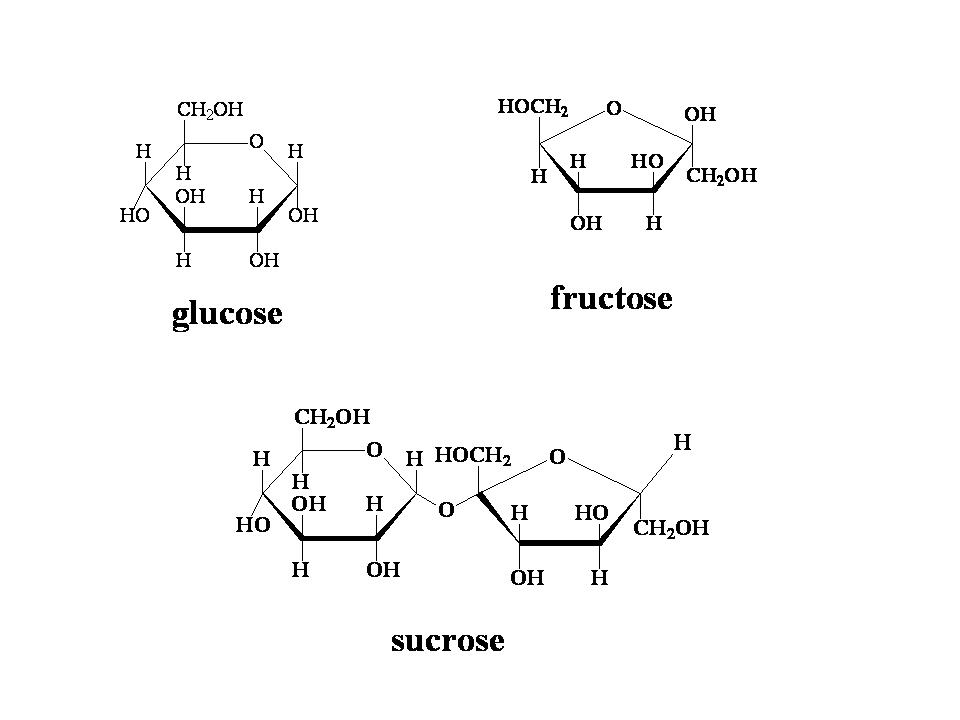
**Biology Chapter 2 Worksheet**

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

1. What are the monomers that make up the following organic polymers?
   1. Carbohydrates\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Proteins \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Lipids\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Nucleic Acids\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is an isotope?
3. What is an isomer?
4. Glucose &Fructose are pictured below. What is the main difference between them and why are glucose and fructose considered isomers?

[](http://www.google.com/url?sa=i&rct=j&q=glucose+fructose&source=images&cd=&cad=rja&docid=_LglPGYZb6fROM&tbnid=dmj42swvZR8mgM:&ved=0CAUQjRw&url=http://cdavies.wordpress.com/2009/01/27/simple-sugars-fructose-glucose-and-sucrose/&ei=pRVDUpWmDIPy9gTLmIHACw&bvm=bv.53077864,d.eWU&psig=AFQjCNHbuSCVjqtDFNzX3ZAiXid7TCe7NA&ust=1380214561028275)

1. What does ATP Stand for?
2. ATP is created by living things because it stores a lot of energy. Where in ATP is the energy stored?
3. Sketch a picture depicting how ATP is hydrolyzed to ADP to released energy, and how ATP is reformed
4. Label the pH scale below with base, acid, & neutral. Also, draw the H+ ions in showing where they are most concentrated

0----------------------------------7--------------------------------14

1. Label the following in the graphs below with:

Activation energy time energy reactants products

1. What is an enzyme?
2. What is the active site of an enzyme, and why is it important?
3. What model do we use to explain how enzymes and substrates fit together?
4. What would happen if you changed the shape of the active site of an enzyme by putting in the wrong amino acid?
5. What 3 things will affect the function of an enzyme?