Chapter 7-1: Glycolysis and Fermentation Bio Honors Notes

	*Breaking down of molecules to produce	·
	-Process begins with glycolysis, and then goes to	or
	respiration.	
Overview of Cellular Resp.		
·	1 Organic compounds converted to	
	producing small amount of	
	(an electron carrier similar to NADPH)	
	required.	•
	2If	is
	present, pyruvic acid broken down & NADH used to make	
	(Alternative Pathway) - Happens when	
	present. Recycles	
	to keep glycolysis going produce	
	*A 6 C is oxidized (loses electrons) into 2 three C acids.	
	-Takes place in of cell	
	-4 steps	
Overall process of Glycolysis		
Step 1	-2 groups from 2 attach to molecu	ule of
	-Forms aC molecule (Fructose 1, 6-bisphosphate)	
	-Turns 2into 2	
Step 2	-6 C molecule just formed is into two 3 C PG	AL ()
	molecules.	
Step 3	-2 molecules of are each oxidized (lose	e-) & receive a P
	molecule (from inorganic present in).	
	-To do this, 2 molecules of (1per PGAL) are ch + H ⁺	anged to
Step 4	groups are broken off to transform 4 into 4	
	-This leaves 2 molecules of	
Fermentation	-If glycolysis occurs in an(no oxygen) environn	nent, then
	fermentation follows.	
	-Doesmake, but regenerates NAD ⁺ ($\leftarrow \rightarrow$
) to keep going.	
	-Occurs in	
	-2 types of fermentation &	
	-They differ in used &	made.
	* is converted into (a 3C compound), using enzymes.	
	-This will form, the oxidation and reduction (gain electrons) of	
	NAD+ with H+ (NADH ←→ NAD+) keeps glycolysis going.	
	-Used to manufacture products.	