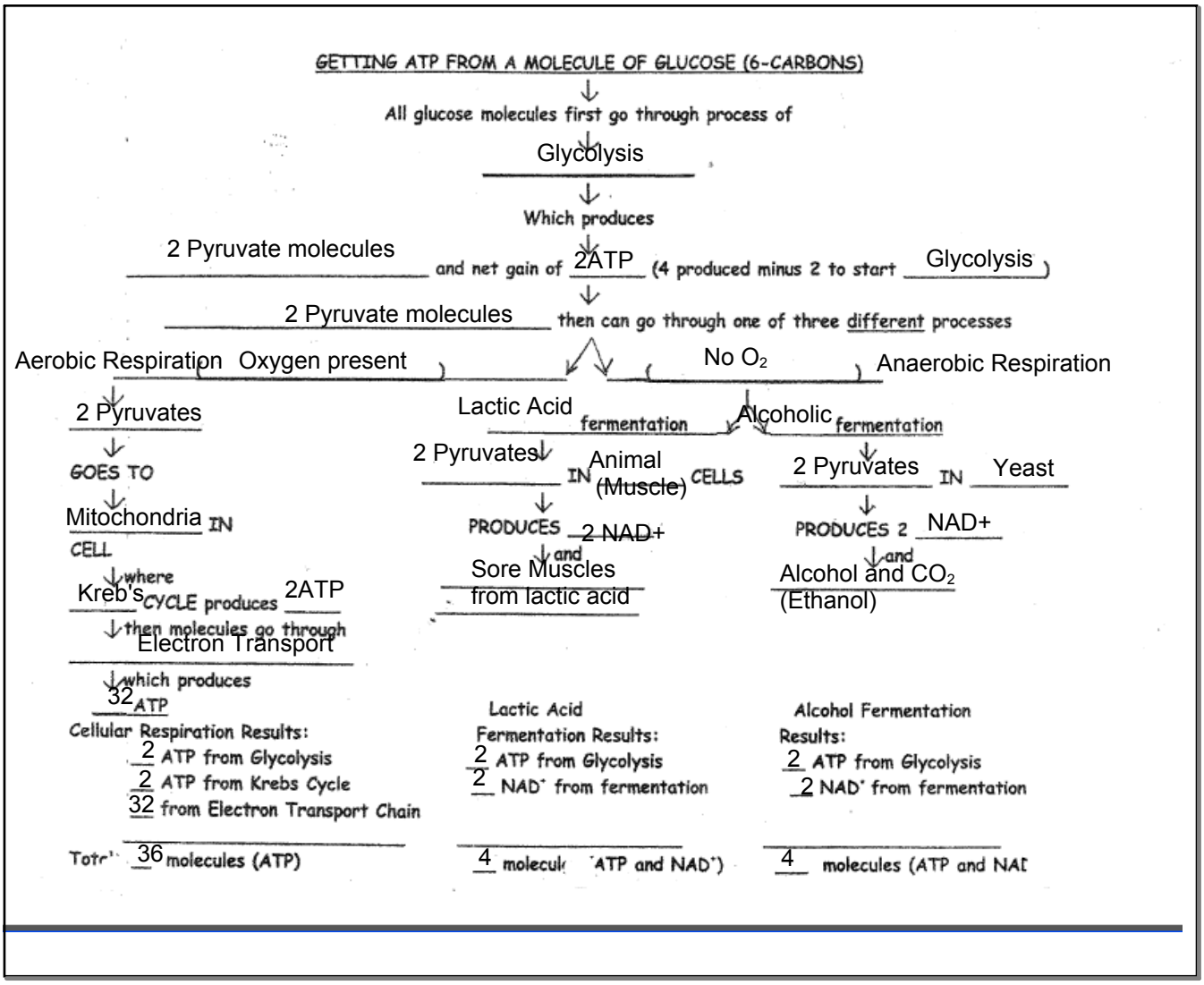
GETTING ATP FROM A MOLECULE OF GLUCOSE (6-CARBONS)
All glucose molecules first go through process of
Glycolysis
Which produces
2 Pyruvate molecules and net gain of 2ATP (4 produced minus 2 to start Glycolysis)
2 Pyruvate molecules then can go through one of three different processes
Aerobic Respiration Oxygen present
No O_2
Anaerobic Respiration
2 Pyruvates
GOES TO
Mitochondria IN CELL
where Kreb's CYCLE produces 2ATP
then molecules go through Electron Transport
which produces 32 ATP
Cellular Respiration Results:
2 ATP from Glycolysis
2 ATP from Krebs Cycle
32 from Electron Transport Chain
Total 36 molecules (ATP)
Lactic Acid fermentation
2 Pyruvates IN Animal (Muscle) CELLS
PRODUCES 2 NAD+
and
Sore Muscles from lactic acid
Lactic Acid Fermentation Results:
2 ATP from Glycolysis
2 NAD+ from fermentation
4 molecules (ATP and NAD+)
Alcoholic fermentation
2 Pyruvates IN Yeast
PRODUCES 2 NAD+
and
Alcohol and CO_2 (Ethanol)
Alcohol Fermentation Results:
2 ATP from Glycolysis
2 NAD+ from fermentation
4 molecules (ATP and NAD