Respiration of Glucose:

The first stage of glucose metabolism is:

It begins with the 6-C molecule

Step 1: which is \[ \text{rxn type} \] to form the molecule

Step 2: is then \[ \text{rxn type} \] to form the 6-C molecule

Step 3: which is then \[ \text{rxn type} \] to form the 6-C molecule

Step 4: which is then cleaved into 2 X 3-C molecules, ketone & aldehyde

Step 5: is isomerized into thus generating 2 X 3-C fragments of

Step 6: Yields 2 X 3-C molecules of

*The high-energy phosphates are removed via

Step 7: To form 2 X 3-C molecules of
ENERGY TALLY FOR GLYCOLYSIS

Step 8

ATP Invested/Lost

ATP made for a net total of ATP!

& NADH

Step 9

Is then

To form 2 X 3-C molecules of

Step 10

* The last high-energy phosphates are removed via

TO FINALLY FORM 2 X 3-C molecules of

+ OXYGEN, these molecules are imported into the of a cell to go the Prep cycle, TCA, & Oxidative Phosphorylation

Which causes

When OXYGEN RETURNS, It is converted back into PYRUVATE In the Via the process known as the

- OXYGEN YEAST

- OXYGEN

* SKELETAL MUSCLE, RBCs

aka the process of

FOR A NET YIELD OF ATP

3-C molecule

2-C molecule

and

1-C molecule
PARKING LOT OF TERMS:
Anaerobic
Fermentation
Gluconeogenesis
Glycolysis
Cori Cycle
Liver
Cytoplasm
Mitochondria
Muscle soreness

Reaction Types

Dephosphorylation
Dephosphorylation
Phosphorylated
Phosphorylated
Phosphorylated
Isomerized
Isomerized
Isomerized
CO₂
Lactic Acid/Lactate
Ethanol
Pyruvate
Glucose
Glucose-6-Pi
Fructose-6-Pi
Fructose-1,6-BisPi
Dihydroxyacetone-Pi
1,3-Bisphosphoglycerate
3-Phosphoglycerate
2-Phosphoglycerate
Glyceraldehyde-3-Pi
Phosphoenolpyruvate