**AP Biology: Cellular Respiration Diagram**

1. On the “cell” provided label the following:

Mitochondrial Membrane- color orange

Mitochondrial Matrix- color yellow

1. Label the following processes in the correct locations:

Glycolysis

Conversion of pyruvate to acetyl CoA

Kreb’s Cycle

Electron Transport Chain

1. For each of the processes above include the following:

Reactants and Products

Amount of ATP, NADH, FADH2 produced

An explanation in words of what occurs in each

1. Draw a star next to the name of the process(es) that use oxidative phosphorylation to form ATP
2. Draw a smiley face next to the name of the process(es) that use substrate level phosphorylation to form ATP
3. Explain which processes occur if oxygen is NOT present
4. Explain the importance of chemiosmosis for the production of ATP
5. Explain the phrase proton motive force as it relates to the production of ATP
6. Explain the function of NADH and FADH2

Cell Membrane

 Cytoplasm