Honors Biology Name:

*Electron Transport Chain Cornell Notes*

What is the reduction of water? Why is oxygen important to this process?

What is the chemical equation for the oxidation of NADH?

How many ATP molecules are indirectly made from an NADH molecule? An FADH2 molecule? Why are they different?

Where do the NADH and FADH2 molecules come from?

Why is breathing oxygen essential to respiration?

Why doesn’t glucose always produce 38 ATP?

How are ADP and P joined to make ATP (I am looking for a little detail, not just ATP synthase)?

How do H+ get across the inner membrane, back into the matrix?

Why do H+ want to cross the inner membrane from the inner membrane space (outer compartment)?

What do the protein complexes (protein pumps) do with the energy gained by the oxidation of NADH?