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- 1. There are \_\_\_\_\_ total C-C and C-H bonds present in glucose.
- 2. The complete oxidation of glucose via glycolysis and the TCA cycle yields \_\_\_\_\_ NADH and \_\_\_\_ FADH<sub>2</sub>. Compare to #1.
- 3. The complete oxidation of the number of NADH and  $FADH_2$  indicated in #2 to NAD+ and FAD via the electron transport chain will transfer \_\_\_\_\_ electrons to  $O_2$  creating \_\_\_\_\_  $H_2O$ .
- 4. The transfer of the number of electrons indicated in #3 to  $O_2$  is coupled to the development of a gradient of \_\_\_\_\_ protons across the inner mitochondrial membrane.

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