The Citric Acid Cycle (Citrate Cycle, Tricarboxylic Acid (TCA) Cycle, Krebs Cycle)

Acetyl-CoA + 3NAD$^+$ + FAD + GDP + Pi + 2H$_2$O $\rightarrow$ 2CO$_2$ + CoA-SH + 3NADH + FADH$_2$ + GTP + 2H$^+$

Pyruvate (from glycolysis or aa breakdown)  Fatty acids (via "β-oxidation")

Acetyl-CoA

Citrate

Cis-Aconitate

Isocitrate

α-Ketoglutarate

Oxalosuccinate

Malate dehydrogenase

Fumarase

succinate dehydrogenase

α-ketoglutarate dehydrogenase complex

[ ] cis-aconitate and oxalosuccinate are reaction intermediates

** the carbons from acetyl-CoA occupy defined positions in the cycle intermediates in the first round (they aren't immediately released as CO$_2$)