Welcome back! Hope you had a great TG Weekend and Holiday

1) When a cell is converting glucose into fatty acids, the entire process involves both cytoplasmic and mitochondrial biochemical reactions. Draw a cartoon representation of the flow of carbon from glucose to a synthesized fatty acid molecule within the cell, showing key intermediates and the location of key reactions (not whole pathways), to get the point across that the flow of carbon from glucose to fat is very different from that of fully catabolism of glucose into CO₂.

2) The “push pull” regulation of blood glucose starts at the pancreas, which is either secreting insulin or glucagon. Starting with these two simple facts, 1) that glucagon is a hormonal signal that glucose is too low, or that “glucose is gone” and 2) that glucagon works (to a first approximation) by promoting phosphorylation of its target proteins, reconstruct as many of the features of glucagon action as you can below.