

CELLULAR RESPIRATION WORKSHEET

1. Phosphofructokinase is considered to be the enzyme responsible for controlling the rate-limiting step of the glycolytic pathway. Why would this step be considered rate-limiting step? Explain with reference to the feedback mechanisms that are occurring in cell respiration.

PFK helps to phosphorylate fructose so that the molecule can split somewhat evenly. When ATP levels are too high, ATP itself will inhibit PFK, which halts glycolysis. This feedback inhibition slows down all of cellular respiration until citrate levels get so low

