Exp. 9 post lab questions

1. The amine functional group (H_2N-R) is nucleophilic and is responsible for reacting with the acetic anhydride in this experiment. Since reaction runs more efficiently in a homogenous solution (why?), hydrochloric acid is used to make the p-phenetidine soluble in aqueous solution (how?). How does HCl $_{(aq)}$ affect the nucleophilicity of the amine functionality of p-phenetidine? Explain the role of sodium acetate trihydrate in this reaction Will the reaction work without sodium acetate trihydrate?