

## Question 17 (3 marks)

Explain why alkanes and their corresponding alkenes have similar physical properties, but very different chemical properties. 3

They have similar physical properties because they contain the same elements just in different proportions. Their masses are similar because the exclusion/addition of hydrogen atoms only raises/lowers this mass slightly in comparison because they have little molecular mass. They have different chemical properties because the bonds within them are different and as a result they react differently.