

**Power Point Study– 08-1 Substitution Reactions SN2 Name:**

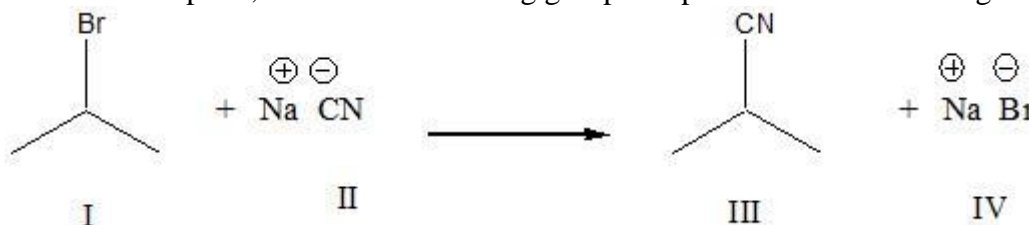
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1) Use the equation below to answer the questions below.

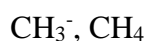
$$\text{Rate} = k [\text{A}] [\text{B}]$$

- What is the order of reaction?
- What is the order of reaction with respect to A?
- What will happen to the rate of reaction if the concentration of B is doubled?

2) Label the nucleophile, substrate and leaving group and product in the following reaction.

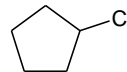
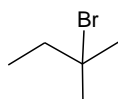


3) Circle the stronger base in the following pairs.

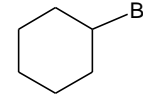
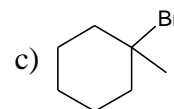
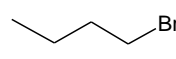
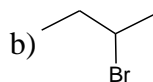
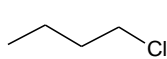
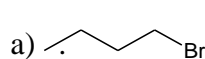


4) Identify the following as 1°, 2° or 3° halides.

1-bromo-2-methylpropane



5) Circle the substrate in the pairs given that will undergo  $\text{S}_\text{N}2$  faster.



6) Write the missing substrate, product or nucleophile in the following reactions.

