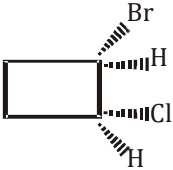
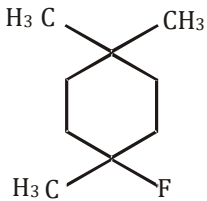


NATURE OF CARBON-HALOGEN BOND**Bonding In Alkyl Halide****Table:** Carbon halogen bond lengths

Bond	Bond length(Å)
CH ₃ - F	1.39
CH ₃ - Cl	1.78
CH ₃ - Br	1.93
CH ₃ - I	2.14

Ex. Classify the compound as a primary, secondary and tertiary halide

- (a) $(\text{CH}_3)_2\text{CH}-\text{CH}_2\text{Cl}$
- (b) 
- (c) 
- (d) $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3 - \text{CH} - \text{CH}_2\text{Cl} \end{array}$
- (e) Isopentyl bromide
- (f) Neopentyl iodide

Sol. (a) Primary (b) Secondary (c) Tertiary
 (d) Primary (e) Primary (f) Primary