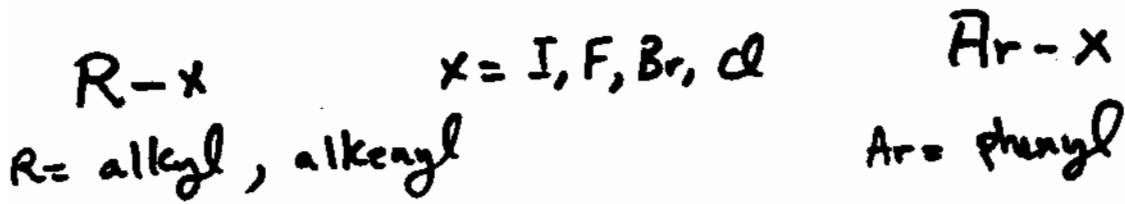
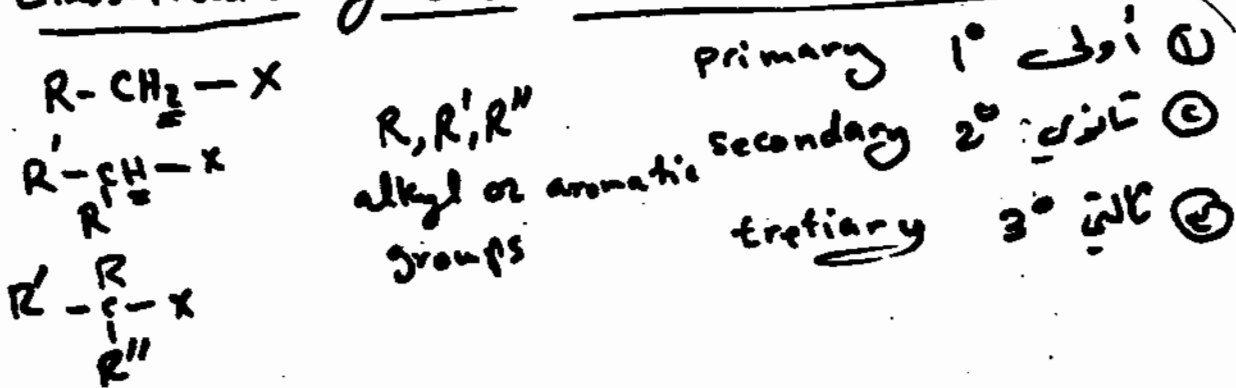


(55) الهاليدات العضوية Organic Halides

- Compounds with one or more halogens attached to one or more carbon atoms



Classification of O.H. تصنيف الهاليدات العضوية



Nomenclature التسمية

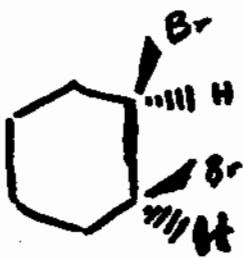
- have seen before with C-C, C=C, C≡C, C≡C

with cyclo alkyl halide

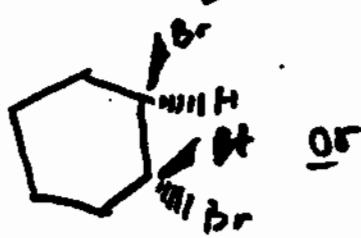
مع الألقانات حلقة

- stereo configuration

تعبير الترتيب لترانج Cis, trans



cis-1,2-dibromocyclohexane



trans-1,2-dibromocyclohexane

Stereoisomers

Physical Properties

الخواص الفيزيائية

(56)

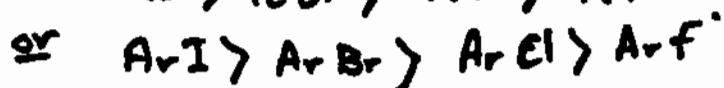
① B.P. and MP

درجات انصهار و غليان

- organic halide > Hydrocarbons (same # C)
- ↑ with ↑ molecular weight of halogens with the same R or Ar



الوزن الجزيئي



example R = butyl



② Solubility

الذوبانية

- O.H. are polar compounds (عوامل مستقطبة) for the big diff. of electronegativity (الباين الكهربائي)
- $C - X$ but they are not soluble in H_2O (water)
 $\delta^+ \quad \delta^-$ may be they can't make hydrogen bond.
 - They are soluble in most organic solvents

③ Density

الكثافة

- Br, I and poly chloro, poly fluoro > H_2O ($\frac{1}{2}$ ml)
- Cl & F < H_2O ($\frac{1}{2}$ ml)
- Density ↑ with ↑ molecular weight of halogens
 $I > Br > Cl > F$.