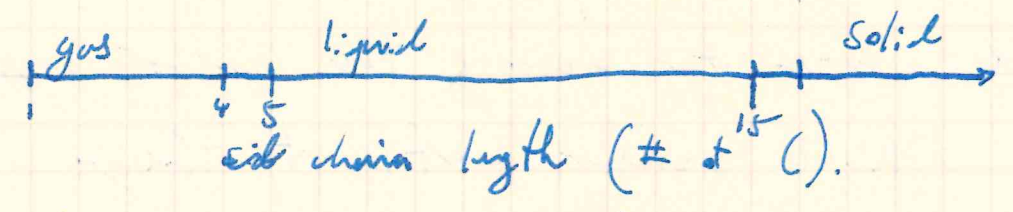


8. Alkanes			
3. Alcohols	-OH	R-OH	ethanol propan-2-ol methoxybenzene
7. Ethers	-O-	R-O-R'	
2. Carboxylic Acids	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{OH} \end{array}$	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{OH} \end{array}$	propanoic acid
6. Esters	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{O}- \end{array}$	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{O}-\text{R}' \end{array}$	ethyl butanoate
4. Aldehydes	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{H} \end{array}$	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{H} \end{array}$	butanal
4. Ketones	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{R}' \end{array}$	propan-2-one
5. Amine	-NH ₂	R-NH ₂	methanamine
1. Amide	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{NH}_2 \end{array}$	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{NH}_2 \end{array}$	N-ethyl propanamide

always longest chain

1988 JPM exam

• ↓ State of matter = ↓ IMF



- ↑ IMF = ↑ Boiling point.
- ↑ IMF = more able to dissolve in ↑ polar liquid.
- Only charged particles can be dissolved in water.
- Only non-polar particles can be dissolved in non-polar liquid.