Naming Chemicals 2

Pre-lesson assignment – Textbook page 174-178

You will need to learn to name these functional groups

Structure	Name	Prefix	Suffix	Example
R	Alkene		-ene	Propene
R	Alkyne		-yne	H C C C H
	Arene	Phenyl-	-benzene	Phenylethane Methylbenzene
OH OH	Phenol		-phenol	4-methylphenol OH
-X -Cl -F -Br -I	Haloalkane Chloroalkane Fluoroalkane Bromoalkane Iodoalkane	Chloro- Fluoro- Bromo- Iodo-		CI-CH ₃ Chloromethane
-ОН	Alcohol	Hydroxy-	-ol	OH Ethanol OH 2-Hydroxypropene
-CHO O II R H	Aldehyde		-al	Propanal
O R C R	Ketone		-one	Propanone

R-O- CH ₃ -O-	Ether	(alkyl)-oxy- Methoxy		—O Methoxyethane
-соон О П С ОН	Carboxylic acid	Carboxy-	-oic acid	O OH Ethanoic acid
-COO-R -COO-C ₂ H ₅ O	Ester	(Alkyl) Ethyl	-oate	O O Ethyl propanoate
R C CI	Acid chloride		-oyl chloride	O CI Ethanoyl chloride

0	Amide		-amide	0
$R^{C}_{NH_2}$	(Primary)			NH_2
R N R	(Secondary)			Ethanamide
R NR_2	(Tertiary)			
$R \downarrow 0 \downarrow R$	Acid anhydride		-oic anhydride	
CNI	NI:Luila		Nittuil a	Ethanoic anhydride
-CN	Nitrile		-Nitrile	N <u>=</u> /
				Propanenitrile
-NH ₂	Amine	Amino-	-amine	NH ₂
-NHR				Propylamine
-NR ₂				NH ₂
				2-aminopropane

Make notes on naming chemicals with functional groups

Use the following questions as guidance

- 1. Briefly explain how alkanes can be named.
- 2. Briefly explain how to name a chemical with functional groups.

Now complete the summary questions (green box) on each of the pages you studied (pgs. 173, 178, 181).