

Organic names: functional groups

Before you answer the puzzles below fill in the table of organic compounds using:

amine ROH one propylamide RCOOH acyl chloride

Type of compound	Formula	Suffix	Example
aldehyde	RHO	al	propanal
alcohol		ol	ethanol
ketone	RCOR'		propanone
	RNH ₂	amine	propylamine
amide	RCONH ₂	amide	
carboxylic acid		oic acid	propanoic acid
nitrile	RCN	nitrile	propanenitrile
	RCOCl	oyl chloride	propanoyl chloride

Gridlock 1

Each row, column and 2 x 2 box contains information about the first four types of compound listed above. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

type of compound		formula	
alcohol			RHO
	RCOR'		amine
	formula	suffix	

gridlocks – can you unlock the grid?

Gridlock 2

Each row, column and 2 x 2 box contains information about each of the types of compound amide, nitrile, acyl chloride and carboxylic acid.

type of compound		formula	
amide			RCOCl
	acyl chloride		
			propylamide
		propanoic acid	
suffix		example	

Gridlock 3

Each row, column and 2 x 2 box contains information types of compound: alcohol, aldehyde, ketone and carboxylic acid.

type of compound		formula	
alcohol			
		RCOOH	
		propanal	
	one		
suffix		example	

Organic names: functional groups – answers

Type of compound	Formula	Suffix	Example
aldehyde	RHO	al	propanal
alcohol	ROH	ol	ethanol
ketone	RCOR'	one	propanone
amine	RNH ₂	amine	propylamine
amide	RCO ₂ NH ₂	amide	propylamide
carboxylic acid	RCOOH	oic acid	propanoic acid
nitrile	RCN	nitrile	propanenitrile
acyl chloride	RCOCl	oyl chloride	propanoyl chloride

Gridlock 1 – answers

type of compound		formula	
alcohol	amine	RCOR'	RHO
ketone	aldehyde	RNH ₂	ROH
RHO	RCOR'	ol	amine
RNH ₂	ROH	al	one
formula		suffix	

gridlocks – can you unlock the grid?

Gridlock 2 – answers

type of compound		formula	
amide	carboxylic acid	RCN	RCOCl
nitrile	acyl chloride	RCONH ₂	RCOOH
oic acid	nitrile	propanoyl chloride	propylamide
oyl chloride	amide	propanoic acid	propanenitrile
suffix		example	

Gridlock 3 – answers

type of compound		formula	
alcohol	carboxylic acid	RCOR'	RHO
ketone	aldehyde	RCOOH	ROH
oic acid	ol	propanal	propanone
al	one	ethanol	propanoic acid
suffix		example	