

Organic names: functional groups

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

amine F	ROH	one	propylami	de RC	СООН	acyl	chloride

Type of compound	Formula	Suffix	Example
aldehyde	RHO	al	propanal
alcohol		ol	ethanol
ketone	RCOR'		propanone
	RNH₂	amine	propylamine
amide	RCONH ₂	amide	
carboxylic acid		oic acid	propanoic acid
nitrile	RCN	nitrile	propanenitrile
	RCOCI	oyl chloride	propanoyl chloride

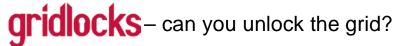
Gridlock 1

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		su	ffix







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 co	ompound	formula		
amide			RCOCI	
	acyl chloride			
			propylamide	
		propanoic acid		
suffix		exa	mple	

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		exar	nple





gridlocks - can you unlock the grid?

Organic names: functional groups – answers

Type of compound	Formula	Suffix	Example
aldehyde	RHO	al	propanal
alcohol	ROH	ol	ethanol
ketone	RCOR'	one	propanone
amine	RNH₂	amine	propylamine
amide	RCONH ₂	amide	propylamide
carboxylic acid	RCOOH	oic acid	propanoic acid
nitrile	RCN	nitrile	propanenitrile
acyl chloride	RCOCI	oyl chloride	propanoyl chloride

Gridlock 1 - answers

type of c	ompound	formula		
alcohol amine		RCOR'	RHO	
ketone aldehyde		RNH₂	ROH	
RHO	RCOR'	ol	amine	
RNH₂ ROH		al	one	
form	nula	su	ffix	





gridlocks - can you unlock the grid?

Gridlock 2 - answers

type of c	ompound	formula		
amide carboxylic aci		RCN	RCOCI	
nitrile acyl chloride		RCONH₂	RCOOH	
oic acid	nitrile	propanoyl chloride	propylamide	
oyl chloride amide		propanoic acid	propanenitrile	
Su	ffix	exar	nple	

Gridlock 3 - answers

type of c	ompound	formula		
alcohol carboxylic acid		RCOR'	RHO	
ketone aldehyde		RCOOH	ROH	
oic acid	ol	propanal	propanone	
al	one	ethanol	propanoic acid	
su	ffix	exar	nple	



