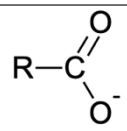
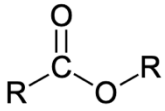
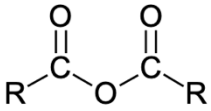
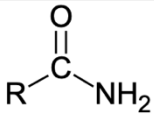
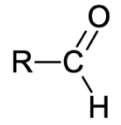
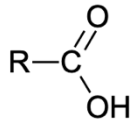
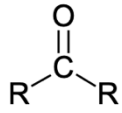
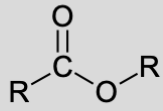
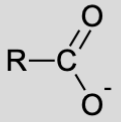
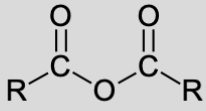
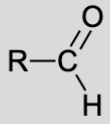
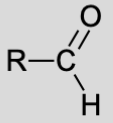
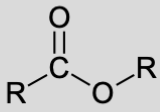
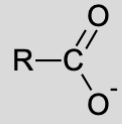
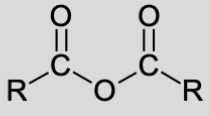
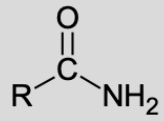
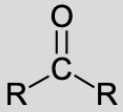
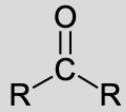
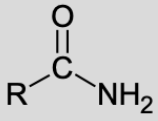
| Functional group | Name | Functional group | Name |
|---|---|---|---|
| R-CN | **nitrile** | $R\text{-}NH_2$ | amine |
|  | carboxylate ion |  | **ester** |
|  | **acid anhydride** |  | amide |
|  | aldehyde |  | carboxylic acid |
|  | **ketone** | R-X | haloalkane |
| **R-OH** | alcohol | **R-O-R** | ether |

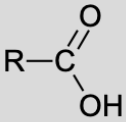
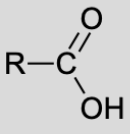
## Gridlock 1 – answers

| functional group | | name | |
|---|---|---|---|
|  |  | acid anhydride | aldehyde |
|  |  | ester | carboxylate ion |
| carboxylate ion | acid anhydride |  |  |
| aldehyde | ester |  |  |
| name | | functional group | |

## Gridlock 2 – answers

| functional group | | name | |
|---|---|---|---|
|  | R-CN | amine | ketone |
| $R\text{-}NH_2$ |  | nitrile | amide |
| nitrile | amide |  | $R\text{-}NH_2$ |
| ketone | amine |  | R-CN |
| name | | functional group | |

## Gridlock 3 – answers

| functional group | | name | |
|---|---|---|---|
| R-X | R-OH | carboxylic acid | ether |
| R-O-R |  | haloalkane | alcohol |
| alcohol | haloalkane | R-O-R |  |
| carboxylic acid | ether | R-OH | R-X |
| name | | functional group | |