

Carbonyl Functional Groups are classified based on the heteroatom that is bonded to the carbonyl carbon:

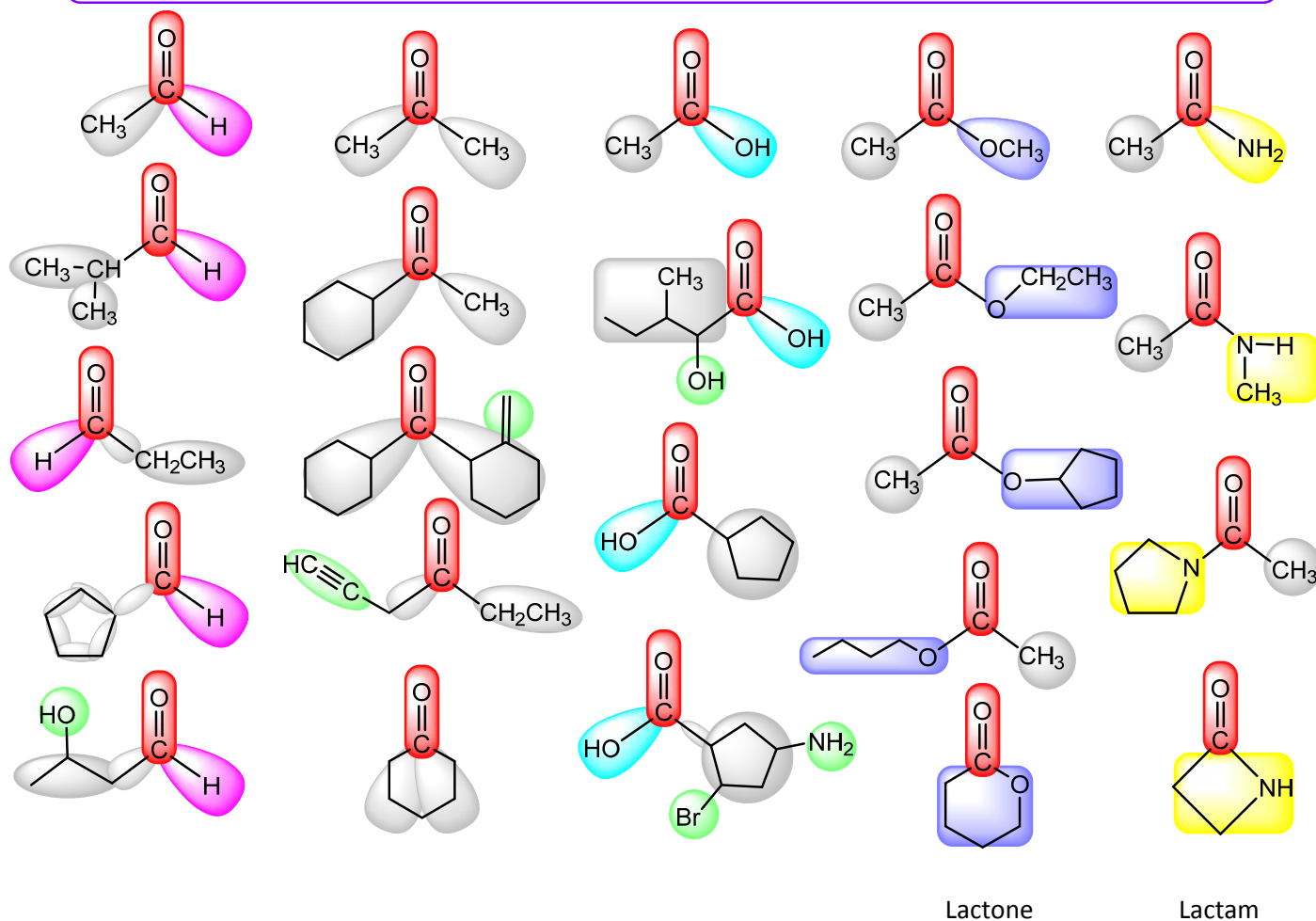
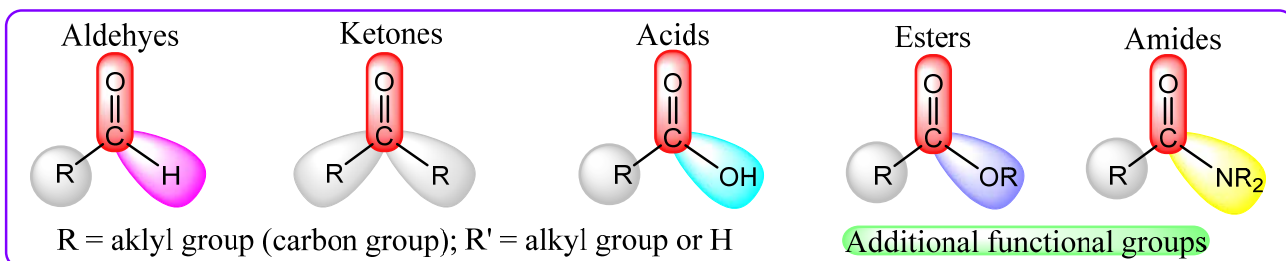
Hydrogen (H) = Aldehyde

Alkyl groups (R) = Ketone

Hydroxy group (OH) = Acids

Alkoxy groups (OR) = Esters

Amino groups (NR₂) = Amides (R may be H or alkyl)



Molecules may contain more than one functional group (green highlights). Esters and Amides also form rings containing the heteroatom; cyclic esters are also called **lactones** and cyclic amides are called **lactams**.