$$RCH{=}CH_2 + CO + H_2 \longrightarrow RCH_2CH_2CHO$$

$$RCH{=}CH_2 + CO + H_2 \longrightarrow RCH(CHO)-CH_3$$

$$CH_3OH + CO \longrightarrow CH_3COOH$$

$$CH_3C{\equiv}CH + CO + CH_3OH \longrightarrow CH_2{=}C(CH_3)-COOCH_3$$

$$CH_2{=}CH_2 + CO + H_2O \longrightarrow CH_3CH_2COOH$$

$$\underset{\diagdown O \diagup}{CH_2-CH_2} + CO + H_2O \longrightarrow HOCH_2CH_2COOH$$

$$\underset{\diagdown O \diagup}{CH_2-CH_2} + CO + ROH \longrightarrow HOCH_2CH_2COOR$$

$$CH_2O + CO + H_2O \longrightarrow HOCH_2COOH$$

$$CH_3CHO + CO + H_2O \longrightarrow CH_3CH(OH)-COOH$$

$$ArCHO + 2CO + H_2O \longrightarrow ArCH_2COOH + CO_2$$

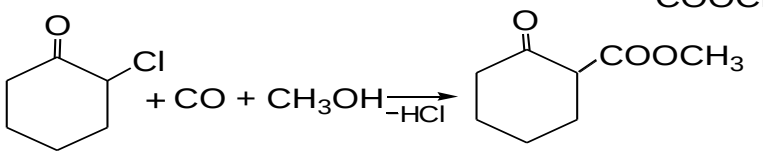
$$ArCHO + 2CO + ROH \longrightarrow ArCH_2COOR + CO_2$$

$$ArCHO + 2CO + H_2O \longrightarrow ArCH(COOH)_2$$

$$\underset{\diagdown O \diagup}{CH_2-CH_2} + CO + 2H_2 \longrightarrow HOCH_2CH_2CH_2OH$$

$$CH_2{=}CH-CH{=}CH_2 + CO + 2H_2O \longrightarrow HOOC(CH_2)_4COOH$$

$$CH_2{=}CHOOCH_3 + CO + CH_3OH \longrightarrow CH_3CH(COOCH_3)OOCH_3$$




**Синтездеу арқылы карбонилдеу реакциясының ерекше мүмкін болатын мысалдары**