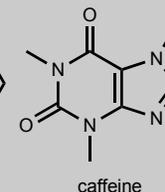
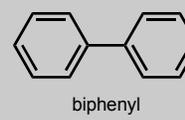
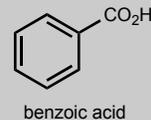
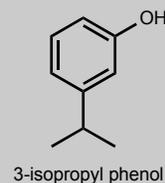


0.3 g each  
20 mL Et<sub>2</sub>O

RCO<sub>2</sub>H / ArOH / RNH<sub>2</sub> / RH  
dissolved in diethyl ether



extract with  
5% NaHCO<sub>3</sub> (5 mL)

Aqueous Phase #1  
RCO<sub>2</sub>Na dissolved  
in aqueous base

Organic Phase #1  
ArOH / RNH<sub>2</sub> / RH  
dissolved in Et<sub>2</sub>O

RCO<sub>2</sub>H = benzoic acid  
ArOH = 3-isopropyl phenol  
RNH<sub>2</sub> = caffeine  
RH = biphenyl

acidify  
with HCl (2.5 mL)

RCO<sub>2</sub>H

extract with  
5% NaOH (3 mL)

Aqueous Phase #2  
ArONa dissolved  
in aqueous base

Organic Phase #2  
RNH<sub>2</sub> / RH  
dissolved in Et<sub>2</sub>O (add 5 mL more Et<sub>2</sub>O)

acidify  
with HCl (4 mL)

ArOH

extract with  
5% HCl (5 mL)

Aqueous Phase #3  
dissolved RNH<sub>3</sub>Cl

Organic Phase #3  
RH dissolved in Et<sub>2</sub>O

make basic  
with NaOH (5 mL)

dry, filter &  
concentrate

RNH<sub>2</sub>

RH