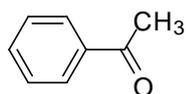


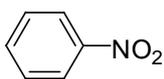
## Effets électroniques – Mésonérie – Acidité

### Exercice 1

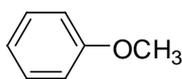
Indiquer le sens de la polarisation des liaisons covalentes dans les structures suivantes :



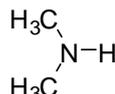
1



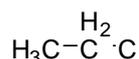
2



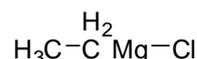
3



4



5



6

### Exercice 2

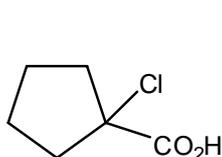
Indiquer pour chacune des molécules suivantes le sens de l'effet inductif (+I, -I) et éventuellement mésomère (+M, -M) qu'induisent les atomes ou les groupements d'atomes soulignés :



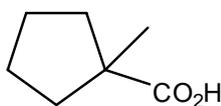
### Exercice 3

Comparer l'acidité des composés suivants

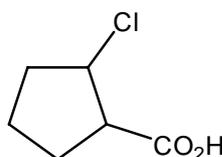
(1)  $\text{CH}_3\text{CHClCH}_2\text{OH}$     (2)  $\text{CH}_3\text{CF}_2\text{CH}_2\text{OH}$     (3)  $(\text{CH}_3)_3\text{CH}_2\text{OH}$     (4)  $\text{CH}_3\text{CF}_2\text{CH}_2\text{SH}$     (5)  $\text{CH}_3\text{CHFCH}_2\text{OH}$



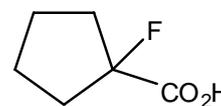
1



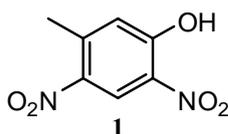
2



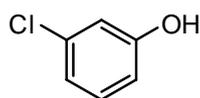
3



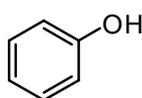
4



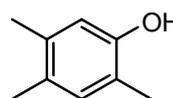
1



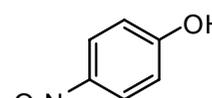
2



3



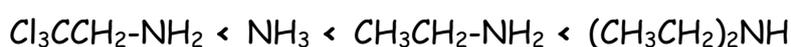
4



5

### Exercice 4

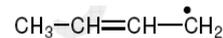
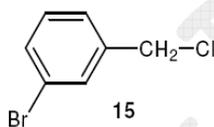
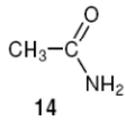
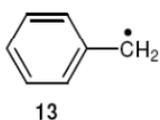
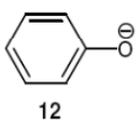
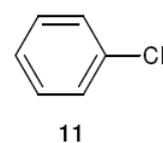
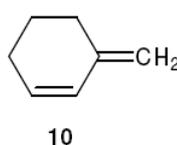
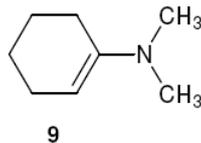
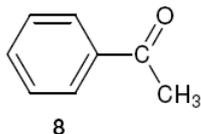
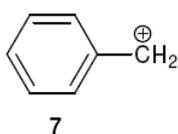
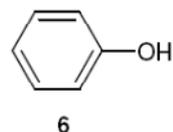
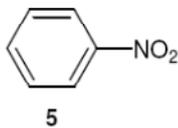
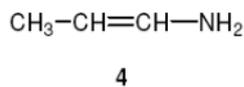
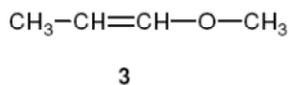
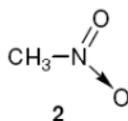
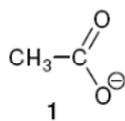
Expliquer l'ordre de basicité décroissante des composés suivants :



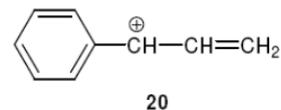
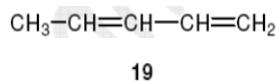
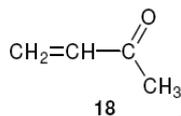
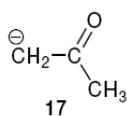
Pourquoi l'aniline  $\text{C}_6\text{H}_5\text{-NH}_2$  est moins basique que la méthylamine  $(\text{CH}_3\text{-NH}_2)$  ?

## Exercice 5

Ecrire les formules mésomères des structures suivantes :



16



## Exercice 6

Lesquels des composés suivants sont aromatiques ?

