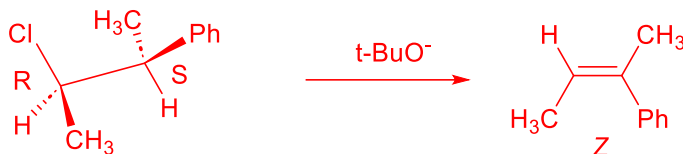
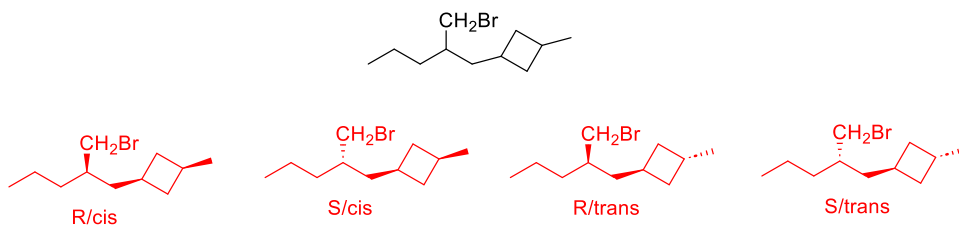


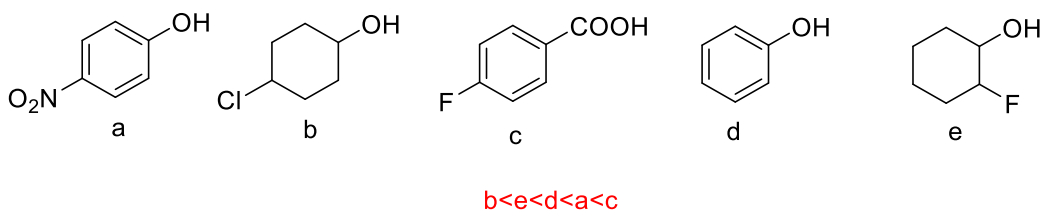
1) Scrivere la struttura del (2R,3S)-2-cloro-3-fenilbutano e dell'alchene che si ottiene per reazione con tert-butilato di potassio, mettendo in evidenza la stereochimica dei centri chirali e del doppio legame.



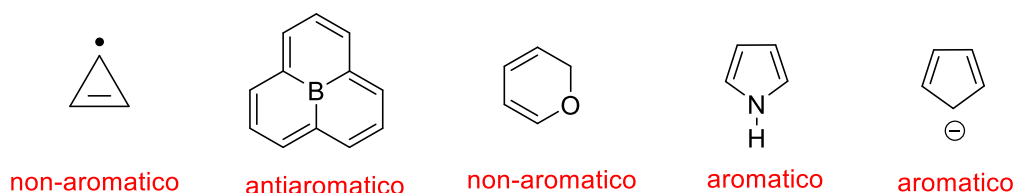
2) Disegnare ed assegnare la configurazione a tutti gli stereoisomeri della seguente molecola. Identificare le eventuali coppie di enantiomeri.



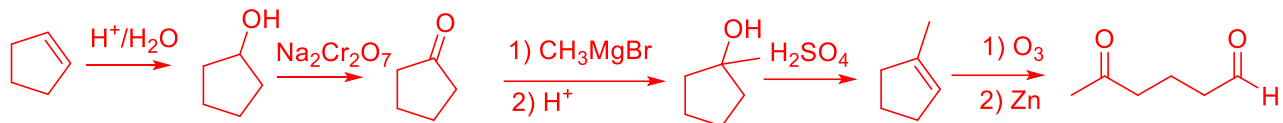
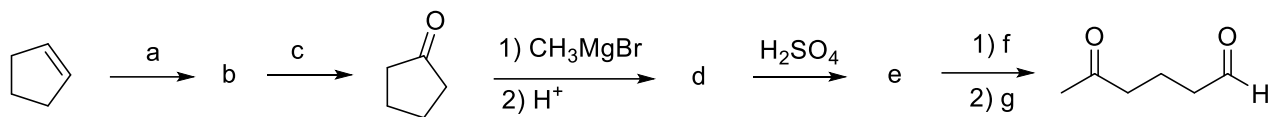
3) Ordinare i seguenti composti in ordine di acidità crescente:



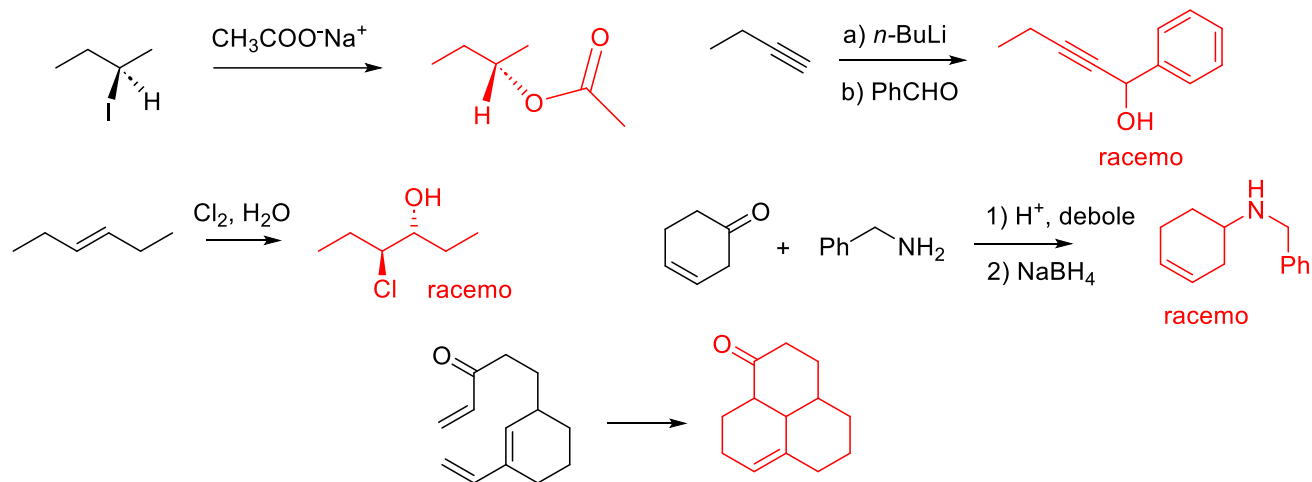
4) Sulla base della regola di Hückel identificare i composti aromatici, antiaromatici e non-aromatici



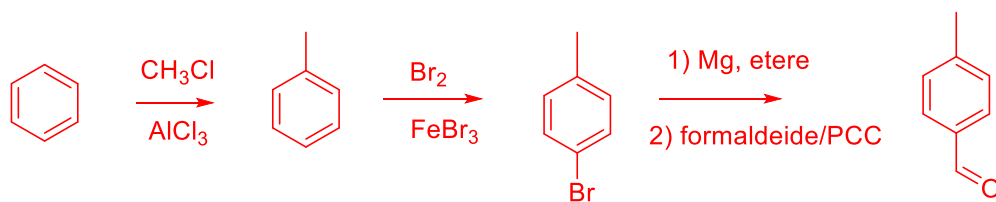
5) Completare con i reagenti e i prodotti mancanti il seguente schema di reazioni.



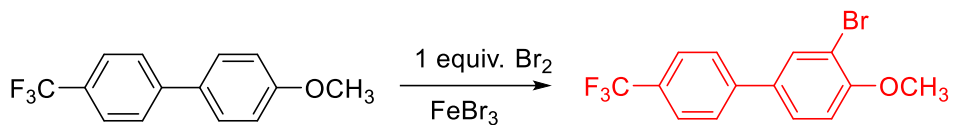
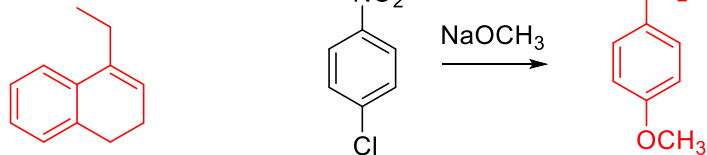
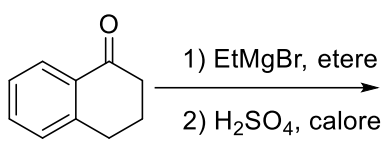
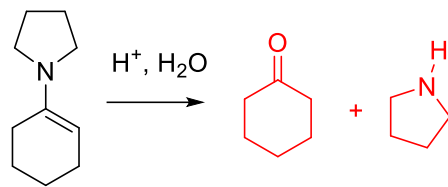
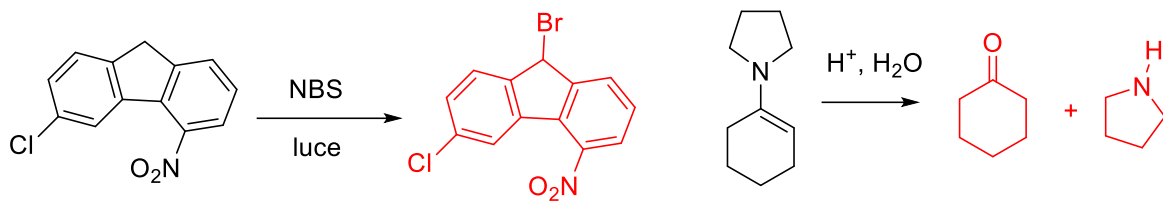
6) Scrivere i prodotti principali delle seguenti reazioni indicando la stereochimica se rilevante:



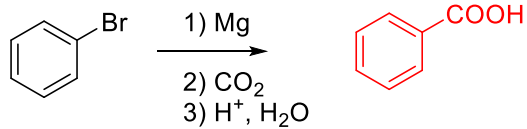
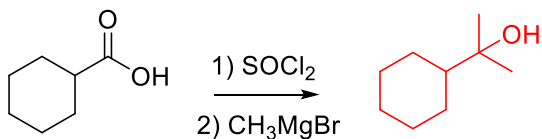
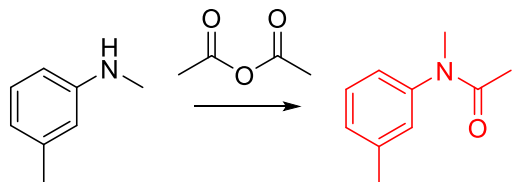
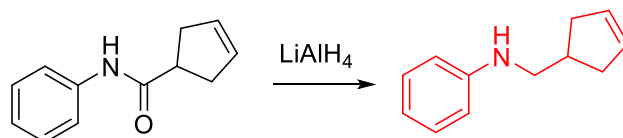
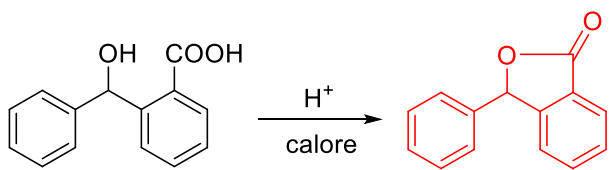
7) Proporre una via sintetica per preparare la *p*-metilbenzaldeide a partire dal benzene. Non è possibile utilizzare come reagente il cloruro dell'acido formico (formilcloruro).



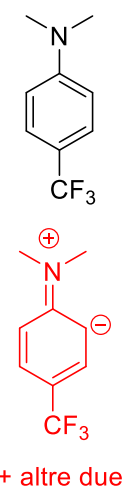
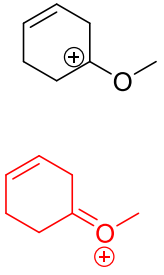
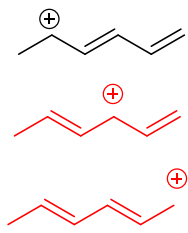
8) Scrivere i prodotti principali delle seguenti reazioni



9) Scrivere i prodotti principali delle seguenti reazioni.



10) Scrivere le forme di risonanza dei seguenti composti



+ altre due