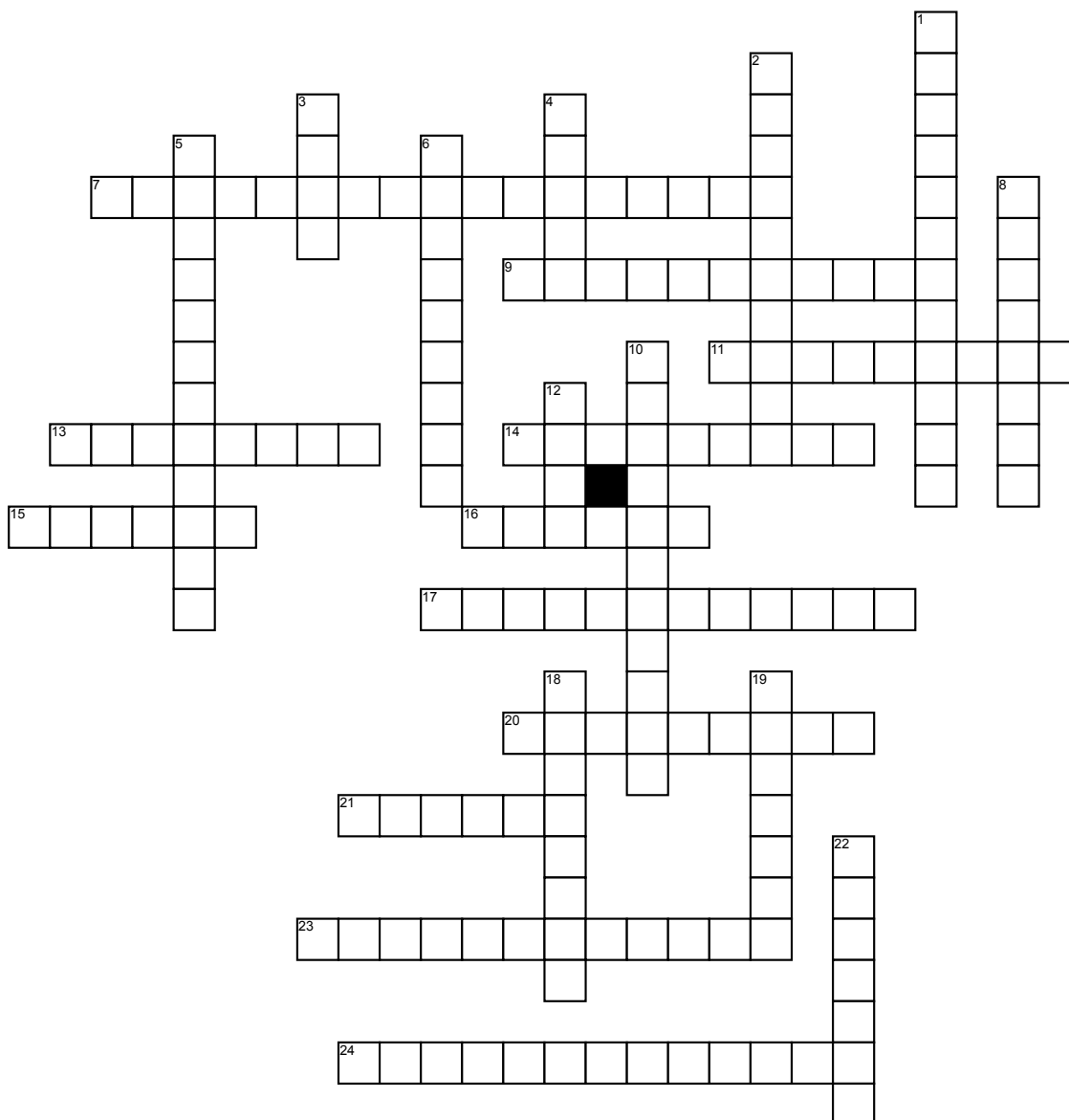


# LSA - Aromatic Chemistry



## Across

7. is the tendency measured by the Pauling scale of an atom to attract the pair of electrons in a bond
9. In an acyclic or cyclic system what is the overlap of more than two 2p orbitals
11. is a reaction in which a compound has a nitro group added to it by a substitution reaction
13. A substance which increases the rate of reaction but remains chemically unchanged at the end of the reaction
14. The name given to the movement of electrons when bonding
15. A three or six membered compound that connects to form a ring
16. All atoms have to be  $sp^2$  hybridised
17. A reaction where one functional group of a chemical compound is replaced by another functional group

20. these are dynamic isomers of a compound where the protons and electrons are in different positions from the original compound
21. a rule to determine whether a planar ring molecule would have aromatic properties
23. A reactant which accepts an electron pair which is positive or slightly positive
24. When different groups on the benzene ring influence the position of the subsequent reactions

## Down

1. When a Chloride group is added within a reaction
2. The reaction when an Alkyl group is removed from one molecule to another
3. a molecule with substituents at the 1 and 4 positions on an aromatic compound
4. a molecule with substituents at the 1 and 2 positions on an aromatic compound

5. The type of group that Meta substituents are when reacting
6. Nomenclature name given to a 5-membered heterocyclic ring with 4 N groups within it
8. The compound removed in the Clemmensen reduction reaction
10. Planar molecule where pi bonds are in resonance which cause an increase in stabilization because of the delocalisation of the electrons
12. a molecule with substituents at the 1 and 3 positions on an aromatic compound
18. The reagent used when Thiophene forms 2, 5-dimethyl thiophene
19. A chemical compound formed of six carbon atoms joined in a planar ring with one Hydrogen atom attached to each
22. Nomenclature name given to a 5-membered heterocyclic ring with 1 O and N group within it