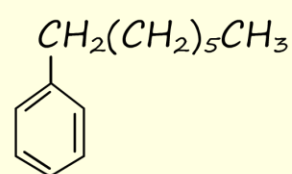
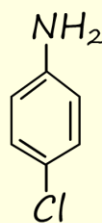
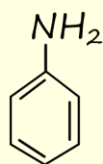
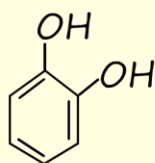
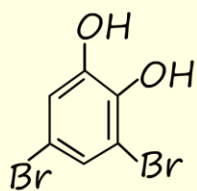
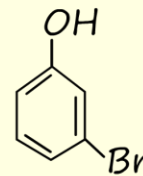
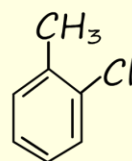
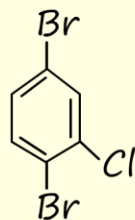
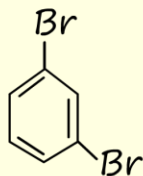
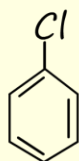
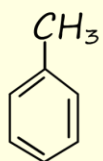


Naming aromatic compounds

Answer all the questions below as fully as you can then check your answers

1. What is the difference between benzene and a phenyl group?
2. What are arenes?
3. Name the following aromatic compounds:



4. Draw 3 isomers of chloromethylbenzene.
5. Draw out the following molecules:
 - a. 1-bromo-3-chlorobenzene.
 - b. 3-nitrotoluene.

- c. 3-hydroxyphenol
- d. 2,4-dichlorophenol
- e. 2-bromophenylamine

Answers

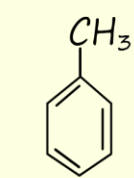
1. What is the difference between benzene and a phenyl group?

Benzene has the molecular formula C_6H_6 , a phenyl group is a benzene molecule with one hydrogen atom removed, its molecular formula is C_6H_5

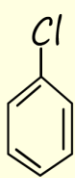
2. What are arenes?

Benzene rings with alkyl substituents attached.

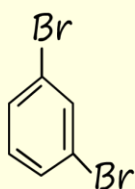
3. Name the following aromatic compounds:



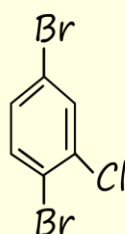
methyl benzene
or
toluene



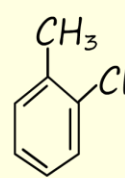
chlorobenzene



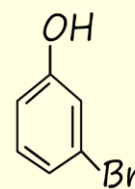
1,3-dibromobenzene



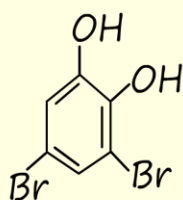
1,4-dibromo-3-chlorobenzene



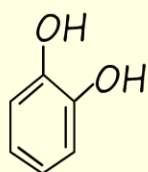
2-chlorotoluene
or
2-chloromethylbenzene



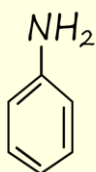
3-bromophenol
or
3-bromohydroxybenzene



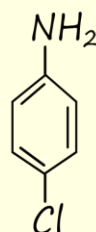
3,5-dibromo-2-hydroxyphenol
or
3,5-dibromo-1,2-dihydroxybenzene



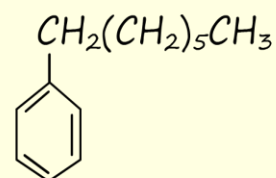
2-hydroxyphenol
or
1,2-dihydroxybenzene



phenylamine
or
aniline

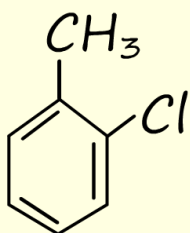


3-chloroaniline
or
3-chlorophenylamine

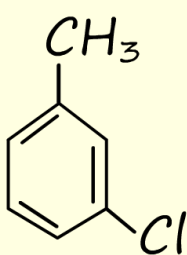


1-phenylheptane

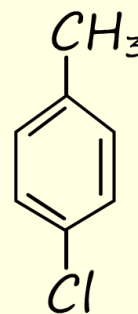
4. Draw 3 isomers of chloromethylbenzene.



2-chloromethylbenzene
or
2-chlorotoluene



3-chloromethylbenzene
or
3-chlorotoluene



4-chloromethylbenzene
or
4-chlorotoluene

5. Draw out the following molecules:

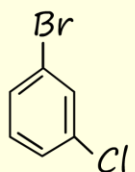
a. 1-bromo-3-chlorobenzene.

b. 3-nitrotoluene.

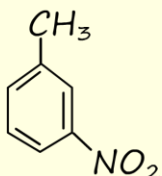
c. 3-hydroxyphenol

d. 2,4-dichlorophenol

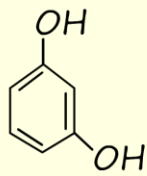
e. 2-bromophenylamine



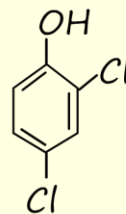
1-bromo-3-chlorobenzene



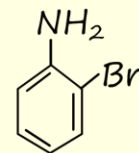
3-nitrotoluene



3-hydroxyphenol



2,4-dichlorophenol



2-bromophenylamine