

Learnzy Academy

Worksheet: Carbon and its Compounds

1. A mixture of oxygen and ethyne is burnt for welding. Can you tell why a mixture of ethyne and air is not used?
2. Ethane, with the molecular formula C_2H_6 has
3. Why is the conversion of ethanol to ethanoic acid an oxidation reaction?
4. Explain the nature of the covalent bond using the bond formation in CH_4Cl .
5. Would you be able to check if water is hard by using a detergent?
6. People use a variety of methods to wash clothes. Usually after adding the soap, they 'beat' the clothes on a stone, or beat it with a paddle, scrub with a brush or the mixture is agitated in a washing machine. Why is agitation necessary to get clean clothes?
7. Explain the mechanism of the cleaning action of soaps.
8. Explain the formation of scum when hard water is treated with soap.
9. What are oxidising agents?
10. Give a test that can be used to differentiate between saturated and unsaturated hydrocarbons
11. What is an homologous series? Explain with an example.
12. While cooking, if the bottom of the vessel is getting blackened on the outside, it means that
13. Why does micelle formation take place when soap is added to water? Will a micelle be formed in other solvents such as ethanol also?
14. How would you distinguish experimentally between an alcohol and a carboxylic acid?
15. Why are carbon and its compounds used as fuels for most applications?
16. What is hydrogenation? What is its industrial application?
17. Which of the following hydrocarbons undergo addition reactions: C_2H_2 , C_2H_4 , C_2H_6 , C_3H_6 , and CH_4 ?
18. How can ethanol and ethanoic acid be differentiated on the basis of their physical and chemical properties?
19. What will be the formula and electron dot structure of cyclopentane?
20. Butanone is a four-carbon compound with the functional group