

Learnyz Academy

Worksheet: Carbon and its Compounds

1. What are oxidising agents?
2. Why does micelle formation take place when soap is added to water? Will a micelle be formed in other solvents such as ethanol also?
3. What change will you observe if you test soap with litmus paper (red and blue)?
4. A mixture of oxygen and ethyne is burnt for welding. Can you tell why a mixture of ethyne and air is not used?
5. What will be the formula and electron dot structure of cyclopentane?
6. Explain the mechanism of the cleaning action of soaps.
7. How can ethanol and ethanoic acid be differentiated on the basis of their physical and chemical properties?
8. Which of the following hydrocarbons undergo addition reactions: $C_{2}H_{2}$, $C_{4}H_{6}$, $C_{3}H_{6}$, $C_{2}H_{4}$, and CH_{4} ?
9. Explain the formation of scum when hard water is treated with soap.
10. 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?
11. Explain the nature of the covalent bond using the bond formation in $CH_{3}Cl$.
12. Why is the conversion of ethanol to ethanoic acid an oxidation reaction?
13. What is hydrogenation? What is its industrial application?
14. What are the two properties of carbon which lead to the huge number of carbon compounds we see around us?
15. How would you distinguish experimentally between an alcohol and a carboxylic acid?
16. What is an homologous series? Explain with an example.
17. Give a test that can be used to differentiate between saturated and unsaturated hydrocarbons
18. Would you be able to check if water is hard by using a detergent?
19. While cooking, if the bottom of the vessel is getting blackened on the outside, it means that
20. Butanone is a four-carbon compound with the functional group