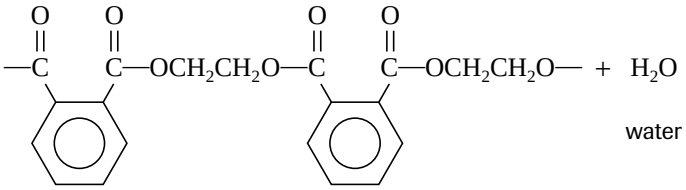

water

polymer

ACTIVITY 2.7.1 MAKING SOAP

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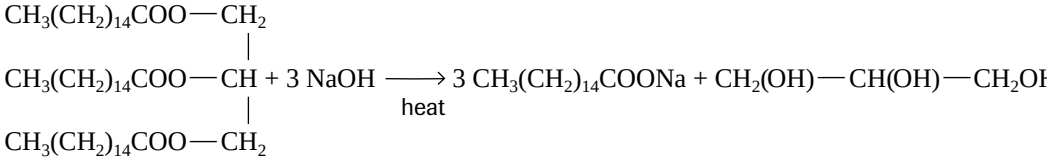
Analysis

(a) In saponification, an ester bond is broken and a carboxylic acid (salt) and an alcohol are recovered. In esterification, a carboxylic acid and an alcohol react to form an ester bond.

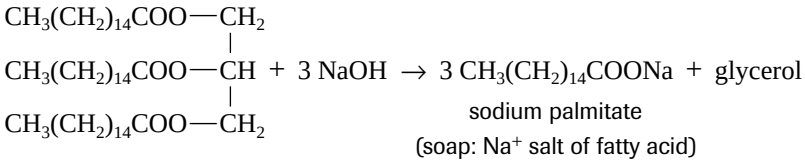
(b) If difference exists, it may be explained by differences in saturation of fats and oils and intermolecular forces in saturated and unsaturated hydrocarbon components of fatty acids.

(c) Soap molecules have a polar end (the ion end) and a nonpolar end (the hydrocarbon end).



palmitin (triglyceride) | sodium palmitate (soap: Na^+ salt of fatty acid) | glycerol

(d) (Sample answer)



sodium palmitate (soap: Na^+ salt of fatty acid)

(e) Filtrate may contain NaCl, NaOH, vinegar, and glycerol.

CHAPTER 2 SUMMARY

Make a Summary

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Polymer	Monomer(s)	Example	Structure	Properties
synthetic polyesters	ester			
synthetic polyamides	amide			
proteins	amino acids			
nucleic acids	sugar, base phosphate			
carbohydrates	monosaccharides			