













16. Dishwasher tablets contain chemicals which remove dirt from dishes.

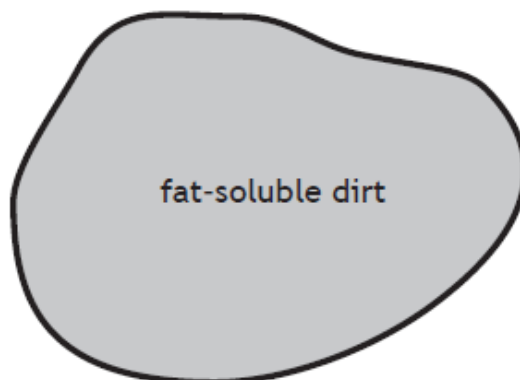
Dishwasher tablets include detergents. These molecules act like soaps to allow mixing of fat-soluble dirt and water.

During the cleaning process, the detergent molecules combine with fat-soluble dirt.

A simplified diagram of a detergent molecule is shown.



(a) Complete the diagram below to show how detergent molecules combine with fat-soluble dirt.



(1)

(b) State the term used to describe the non-polar, hydrocarbon tail of a detergent molecule.

(1)

**Total marks = 25**