



Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 36

1 Key words**[4]**

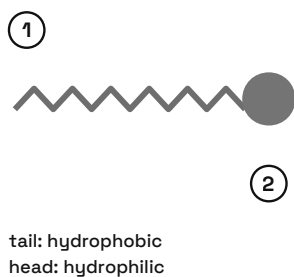
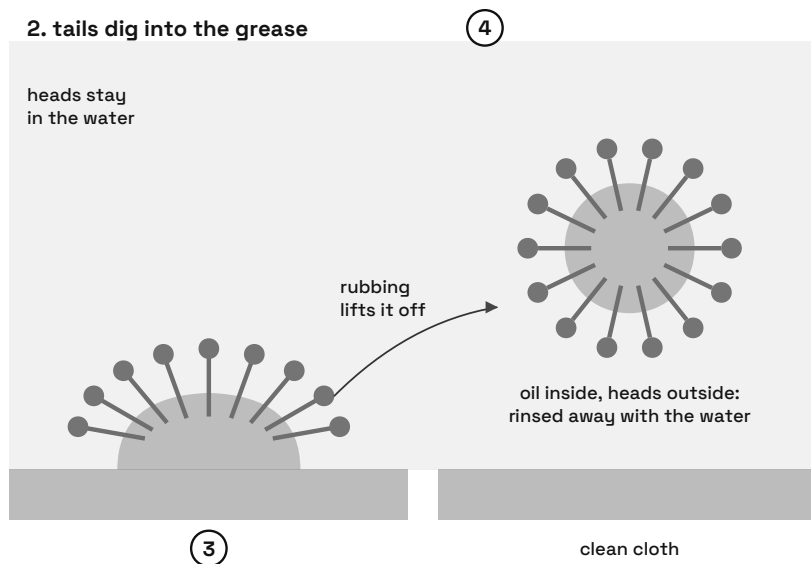
Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

biomagnification detergent ethylene food preservatives fungicides glycerol
hard water herbicides rodenticides saponification

Substances used to keep food from spoiling for a long time are called _____. Making soap by heating an oil or fat with an alkali is called _____; the other product of this reaction is _____. Water that contains dissolved calcium and magnesium salts is _____; in it, soap forms a scum. A cleaning substance made from petroleum, which works in hard water too, is a _____. Pesticides that kill weeds are _____, and those that kill rats are _____. The build-up of a persistent poison such as DDT at every step up a food chain is called _____.

2 Label the diagram**[2]**

The drawing shows how soap removes grease from cloth. Write what belongs in place of 1 to 4: the two parts of a soap molecule and what they love, what is on the cloth, and what the ball of soap and grease is called. Each carries 0.5 mark.

1. a soap molecule**2. tails dig into the grease**

1. _____

2. _____

3. _____

4. _____



3 Multiple choice

[5]

Choose the correct option for each of the following questions.

- i. Which is a group of insecticides? [1]
a. potassium chloride, aldrin, benzene hexachloride
b. DDT, sodium chloride, aldrin
c. dieldrin, DDT, methoxychlor
d. potassium chloride, aldrin, malathion
- ii. Which group does sodium stearate belong to? [1]
a. soap
b. detergent
c. insecticide
d. food preservative
- iii. Which of the following compounds is used to ripen fruits? [1]
a. calcium carbide
b. calcium carbonate
c. sodium sulphate
d. sodium carbonate
- iv. Which gas is the fruit's own natural ripening signal? [1]
a. acetylene
b. ethylene (ethene)
c. carbon dioxide
d. methane
- v. Why does soap lather poorly in hard water, while detergent lathers well? [1]
a. hard water is too cold for soap
b. soap forms an insoluble scum with calcium and magnesium ions; the calcium and magnesium salts of a detergent dissolve
c. detergent contains more sodium hydroxide
d. hard water has no oxygen in it

4 Very short answers

[3]

Write very short answers to the following questions.

- a. Write the full forms of DDT and BHC. [1]

- b. Which gas is given off when calcium carbide reacts with moisture? [1]

- c. Name a fumigant used to protect stored grain. [1]

5 Short answers

[8]

Write short answers to the following questions.

- a. Give a reason: salt is used in the process of making soap. [2]



- b. Give a reason: pickles can be kept for a long time. [2]

- c. Give a reason: using DDT powder upsets the balance of the ecosystem. [2]

- d. Write any two differences between soap and detergent. [2]

6 Long answers [8]

Write long answers to the following questions.

- a. Explain the soap-making process. [4]

- b. Hari's village uses far too many chemical pesticides, causing serious problems for people's health and the environment. What could be done instead? Give suggestions. [4]



[4]

a. In a lake, the water contains 0.000003 ppm of DDT and the fish-eating birds 25 ppm. How many times more concentrated is the DDT in the birds than in the water?

[2]

Answer:

- [2]

[illegible]

Answer:

[2]

A farmer sprays his cauliflowers with an insecticide on Monday and takes them to the Kalimati market on Tuesday. The rapid residue test fails them. Why, and what should he have done?

(not marked)

Put one green banana in a paper bag with a ripe apple and close it. Put a second green banana alone in a closed paper bag, and leave a third in the open. Write the color of each every day.

Banana	Day 1	Day 2	Day 3
in a bag with a ripe apple			
alone in a bag			
in the open			

