

WRITTEN EXERCISE #05 - T14.1

TOPIC 14 ATOMS, ELEMENTS AND COMPOUNDS  
***SUBTOPIC 14.1 ELEMENTS, COMPOUNDS AND MIXTURE***

ANSWER ALL QUESTIONS

1. Rock salt is a mixture of sodium chloride and sand. A student added some rock salt to water and stirred the mixture.

Use words from the list below to complete the following sentences.

**insoluble                  soluble                  solute                  solution                  solvent**

The sodium chloride dissolved in the water to form a colourless .....

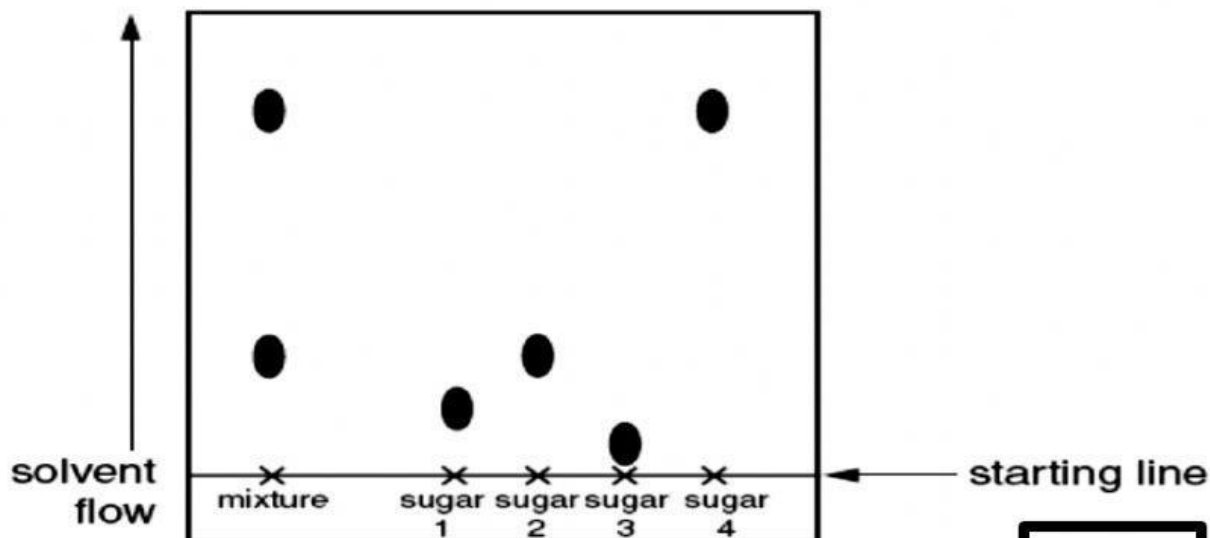
The sand did not dissolve because it is ..... in water.

Sodium chloride is acting as the ..... in this experiment. [3]

- (b) Name a process that could be used to separate dyes.

..... [1]

2. A mixture of two sugars was compared with four different sugars using chromatography. The results are shown in the diagram.

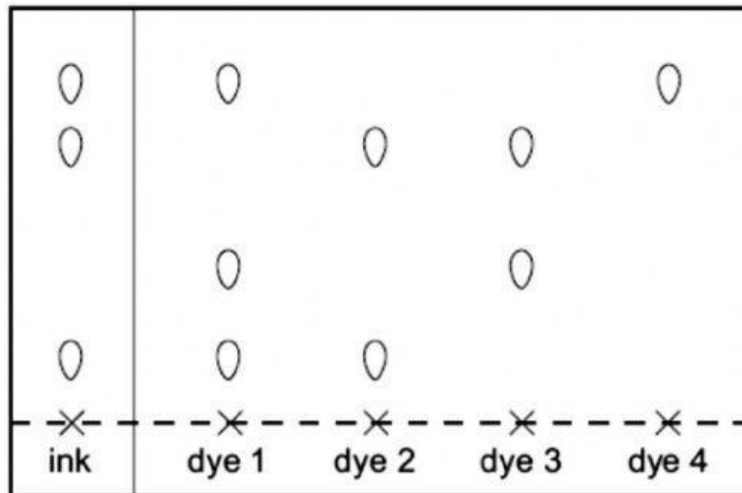


Which two sugars does this mixture contain?

- A 1 and 2      B 1 and 4      C 2 and 3      D 2 and 4



3. A coloured ink is compared with 4 different dyes. The chromatogram produced is shown in the diagram.



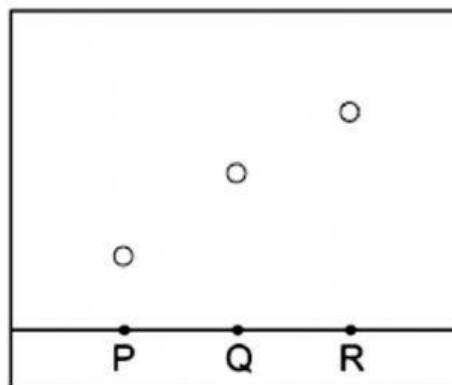
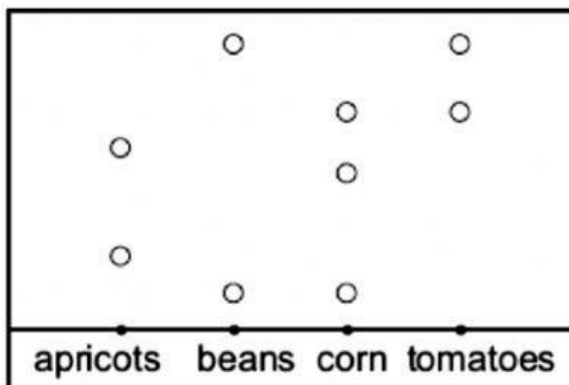
Which dyes does the ink contain?

- A 1 and 2      B 1 and 4      C 2 and 3      D 2 and 4



4. Samples of tinned apricots, beans, corn and tomatoes are tested for additives by using chromatography. The chromatograms are compared with those of three artificial additives, P, Q and R.

The results are as follows.



artificial additives

Which tinned food does not contain any artificial additives?

- A apricots      B beans      C corn      D tomatoes

