

Curriculum Aligned Competency Based Test Items

Science

Class 9 – Chapter 2

Is Matter Around Us pure?

The table shows the processes required to separate different mixtures in four separate jars.

	Jar 1	Jar 2	Jar 3	Jar 4
Process	distillation	filtration	evaporation	sublimation

SAS21S090201

Which jar contains a mixture of two solids?

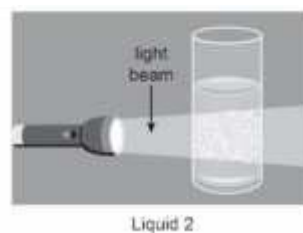
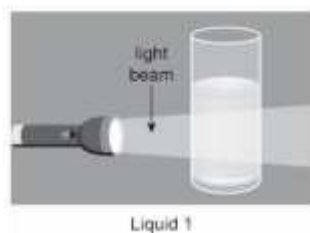
- A. Jar 1
- B. Jar 2
- C. Jar 3
- D. Jar 4

SAS21S090202

What process **does not** involve heating?

- A. Distillation
- B. Filtration
- C. Evaporation
- D. Sublimation

Tina passes light beams through two liquid mixtures in separate glasses.
The picture shows Tina's observations.



SAS21S090203

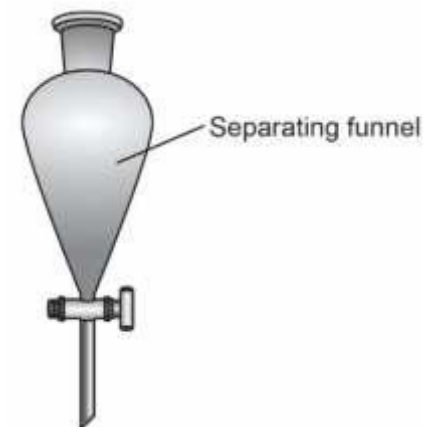
Based on the behaviour of the light beam what are liquids 1 and 2?

	Liquid 1	Liquid 2
A.	solution	colloid
B.	colloid	suspension
C.	solution	suspension
D.	suspension	colloid

SAS21S090204

Which of these is true about the particles in the two liquids?

- A. Particles in both liquids scatter light rays.
- B. Particles in both liquids absorb light rays.
- C. Particles in liquid 1 scatter light rays and particles in liquid 2 absorb light rays.
- D. Particles in liquid 1 absorb light rays and particles in liquid 2 scatter light rays.



SAS21S090205

What are the components of a mixture that can be separated using a separating funnel?

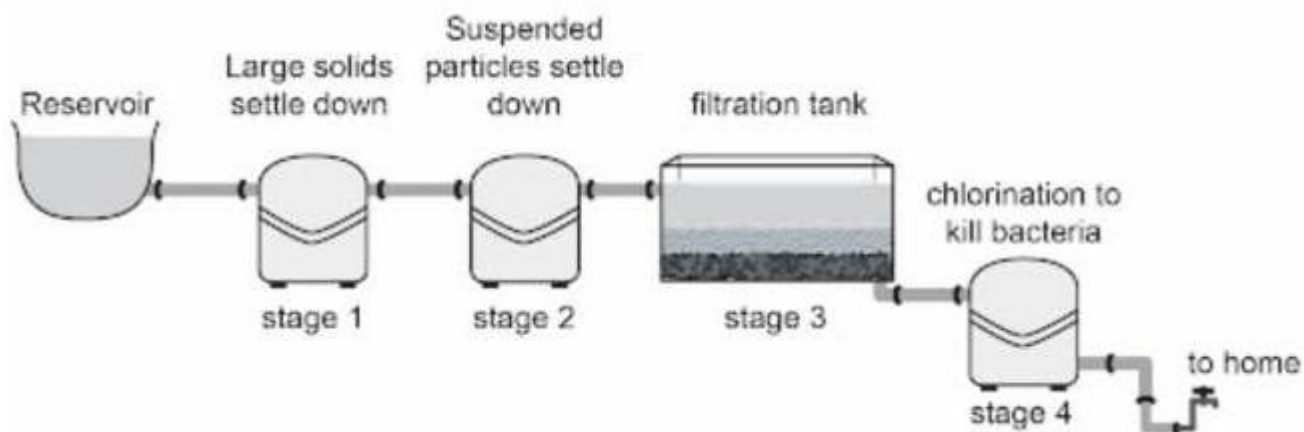
- A. Two miscible liquids
- B. Two immiscible liquids
- C. A gas dissolved in a liquid
- D. A solid dissolved in a liquid

SAS21S090206

Which of these is an **alloy**?

- A. Silver
- B. Copper
- C. Bronze
- D. Aluminium

The flow chart shows a typical water treatment system.



Water treatment system

SAS21S090207

What can be concluded from the flow chart about the water treatment system?

- A. There are two stages of filtering water.
- B. Microorganisms in water are removed in the last stage.
- C. Large impurities in water are removed in the last stage.
- D. There are three stages for removal of suspended impurities.

SAS21S090208

Which of these is common for all chemical changes?

- A. Change in shape
- B. Absorption of heat
- C. Increase in volume
- D. Formation of a new substance

The table lists the properties of four substances.

	Is it shiny?	How does it conduct electricity?
Substance 1	yes	very good
Substance 2	no	very poor
Substance 3	yes	medium
Substance 4	no	poor

SAS21S090209

Which substance is most likely to be a metalloid?

- A. Substance 1
- B. Substance 2
- C. Substance 3
- D. Substance 4

A gas cylinder has the following symbol on its surface.



SAS21S090210

Which property of the gas is represented by the symbol?
