

The Primary Stage of Grades (4-5) School Year 2022-2023

Name: **Answer key**

Subject: **Science**

Date: / /

Chapter 5 Revision worksheet

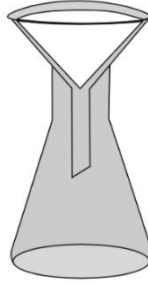
Class: **Grade 4 CP (All sections)**

Question 1:

1. Raj mixes salt in a glass of water.

He wants to separate the mixture and get back the salt.

He does this using the apparatus shown in the picture.



This apparatus **cannot** be used to separate the solution of salt and water. Explain why.

Salt can dissolve in water, so the salt particles will be able to pass through the holes of the filter paper since they are so small.

2. Edward heats a pot of water.

Describe what happens to the temperature of the water when it reaches 100°C.

The temperature of the water remains at 100°C until all the water has changed into water vapour. This is the boiling point of water.

Question 2:

The table shows the properties of some substances.

Substance	State at room temperature	Color	Does the substance dissolve in water?
A	Solid	White	No
B	Solid	green	Yes

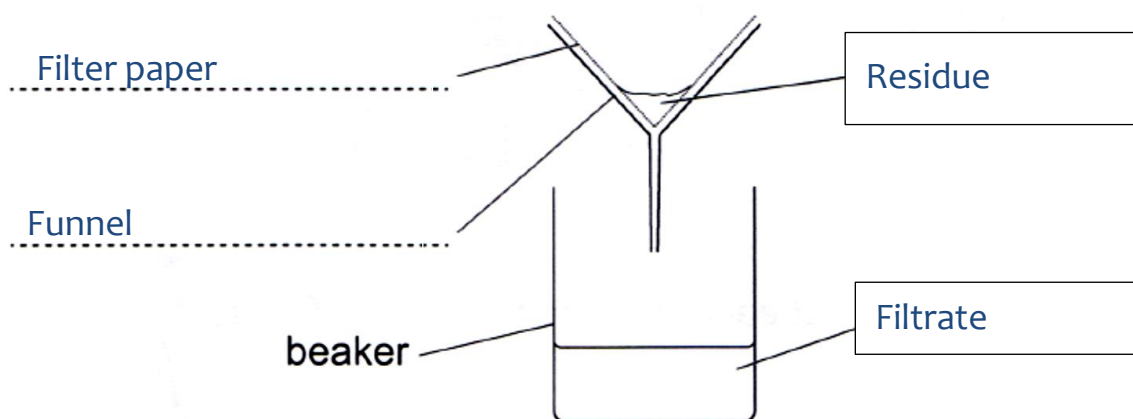
Adam has a mixture of **A, B**.

He wants to separate the mixture.

He adds the mixture to water and stirs it.

He then filters this mixture using this apparatus.

- a) Label the following filtration diagram.



- b) Which substance is the **residue**? **Substance A.**
- c) What does the **filtrate** contain? **Water + Substance B.**
- d) What colour is the filtrate? **Green.**

Question 3:

when a substance is mixed with water it may dissolve.

Complete the sentences about adding substances to water using the words below, you can use each word once:

soluble

evaporates

solution

solute

insoluble

solubility

solvent

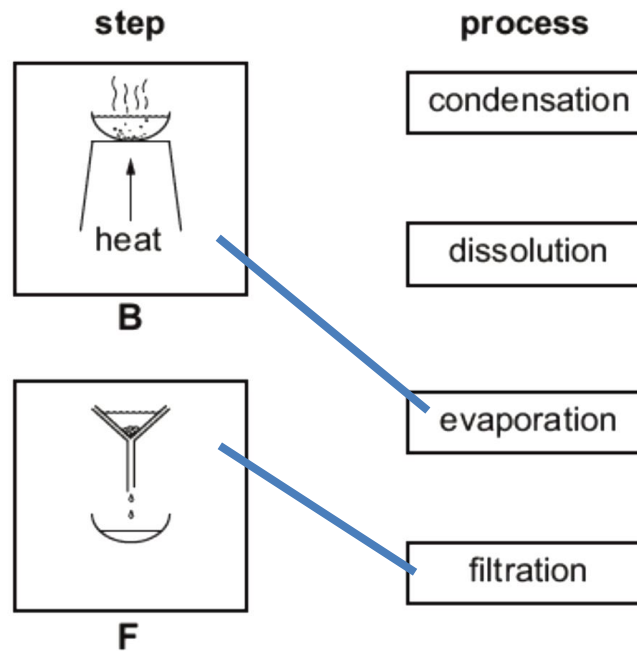
dissolves

- a) The mixture of a substance dissolved in water is called a **Solution**.
- b) A substance is dissolved in water. This substance is called **Solute**.
- c) A substance that can dissolve in water is **Soluble**.
- d) The liquid at which a solid dissolve is called a **Solvent**.
- e) When all water **evaporates** from the salt solution, salt is left behind.
- f) Sand does not make a solution when mixed with water because it is **Insoluble**.

Question 4:

Steps **B** and **F** are processes.

Draw a line between the **step** and the **process** that happens.



Question 5:

Classify the following substances into soluble and insoluble in water.

Clay Flour Sand Sugar Chalk Salt

Jelly powder

Soluble	Insoluble
Sugar	Clay
Salt	Flour
Jelly powder	Sand
	Chalk

Question 6:

Sugar dissolves in water to form a colourless solution.

(a) What is the name of the **solvent** in this colourless solution?

Water
.....

(b) The solution is left in a warm room for 10 days.

After 10 days all the water has disappeared.

What has happened to the water?

It will evaporate.
.....

(c) After 10 days a solid is left behind.

What is the name of the **solid** left behind?

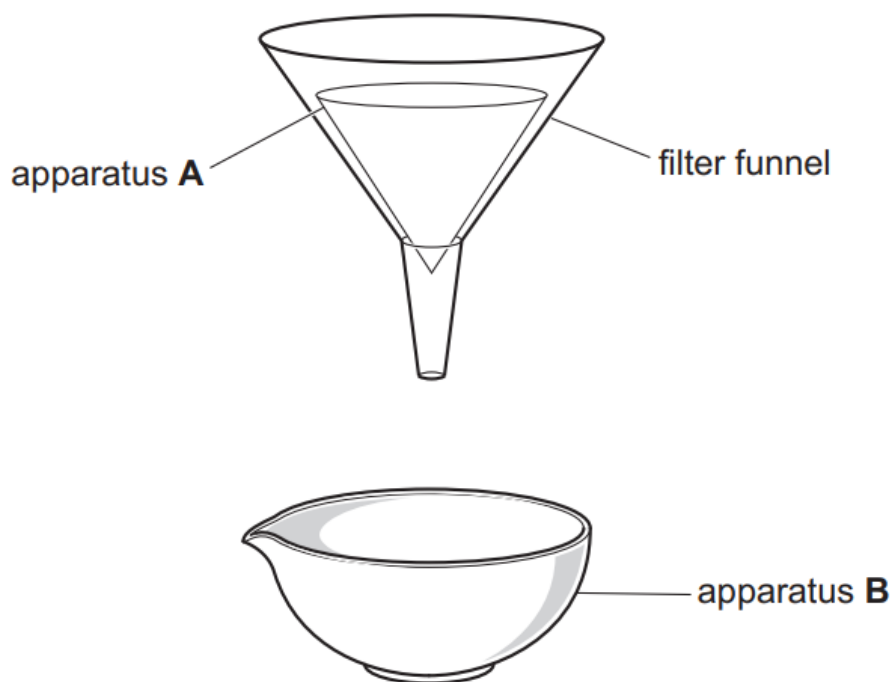
Sugar.
.....

Question 7:

Carlos has a mixture of sand, salt and water.

He wants to separate the mixture.

Here is some of the apparatus that Carlos uses.



(a) What is the name of apparatus **A**?

Filter paper.

(b) What is the name of apparatus **B**?

Evaporating dish.

(c) Explain how you separate the mixture of sand, salt and water.

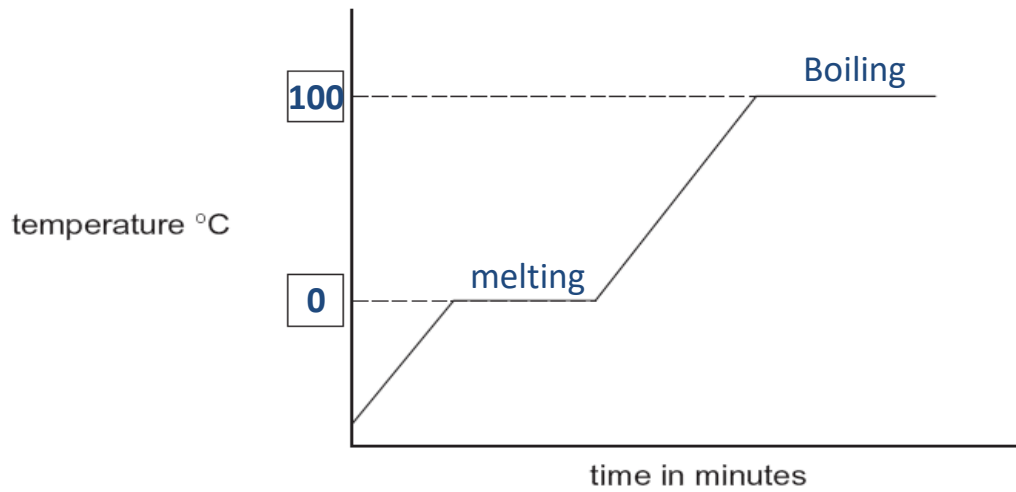
1- Add water to the mixture and stir it, the sand will not dissolve in water, while the sugar will dissolve.

2- We separate the sand from the water by filtration method, the sand will be trapped on the filter paper while the filtrate pass through.

3- We separate the salt from the water by evaporation, and the salt will be left behind.

Question 8:

The graph shows the temperature of pure water as it is heated from a solid to its boiling point.



(a) Fill in boxes on the diagram with the temperature of the melting point and boiling point of water.

(b) The water was heated in a beaker. As the water boils amount of the water decreases. Why?

Because it evaporates.

(c) What happens to the temperature when the water is boiling?
Tick (✓) the correct box.

- stays the same
- increases
- decreases