Reversible and Irreversible Changes Grade 6

Q1(a) Write down the difference between reversible and irreversible changes with three examples of each.

Reversible Changes	Irreversible Changes
Example	**Example**

(b) Write down the difference between chemical and physical changes with one example of each.

Physical Changes	Chemical Changes
Example	**Example**

(c) What causes a substance to change in a chemical change?

_____

Q2. Define the following terms.

1. Prediction:

_____

_____

2. Conclusion:

_____

_____

(b) How can we make a test fair?

_____

(c) How can we make a test reliable?

_____

(a) Define the term **mixture**.

_____

_____

(b) Do you think that the substance in each mixture **react** with each other?

_____

_____

Q3. *Sara* has different mixtures as given below.

write down the method of separation of her mixtures.

Mixtures	Methods of Separation
Rice and flour	
Salt and water	
Tea leaves and sugar	
Beans and marbles	
Iron fillings and sand	

Q4. Hira is trying to dissolve some substances in water.

(a) Predict and write in the table which substances will be solvable in water.

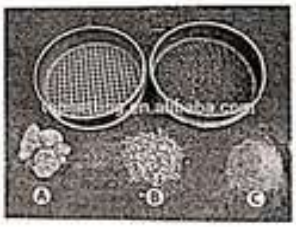
Substance	Soluble	Insoluble
Sugar		
Sand		
Chalk		
Salt		
Black pepper		

(b) Some of the substances are not soluble and making cloudy mixtures. What term do we use for the insoluble in substances in a liquid?

_____

Q5. Here are the 3 techniques to separate a mixture in the given diagram below.

(a) Name the techniques of separating a mixture in the given diagram.



_____ _____ _____

(b) Write down the difference between solute and solvent with one example of each.

Solute	**Solvent**
Example;	Example:

(c) Write down the difference between pure substance and mixture with one example of each.

Pure Substance	Mixture
Example;	Example:

(d) Name the factors that affect dissolving.

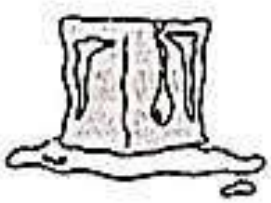
1. _____
2. _____
3. _____

(e) Write down the difference between solution and suspension with one example of each.

Solution	Suspension
Example:	Example:

Reversible and Irreversible Changes Homework Sheet

Q1. State if each change is reversible or irreversible.



Melting ice cube

Frying egg

Freezing water

Burning paper

Melting ice cream

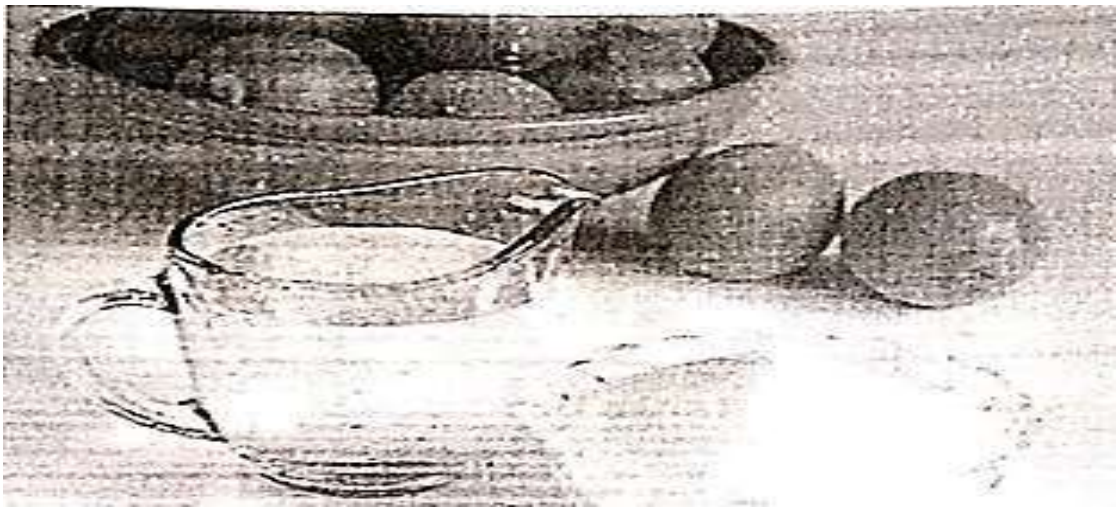
Burning match stick

Melting chocolate

Melting Wax

Making cake dough

Q2. Salma wants to make lemon squash. She has sugar, lemon and both hot and cold water.



(a) Salma uses _____ (hot, cold) water to make tea and sugar dissolves faster.

(b) Justify your answer!

_____

(c) Write one more method that Salma can use to make solutes dissolve faster.

_____

(d) _____ is the solute here in the described experiment and

_____ is the solvent.

Q3 (a) In which beaker do you think the sugar would dissolve most quickly?

Circle two correct pictures.

more solvent

medium amount

less solvent

heated solvent

stirred

sugar cube

(b) Justify your answer. [1]

_____

Q4(a) _____ is a type of mixture where solid particles do not dissolve in liquid. [1]

(i) soluble solution

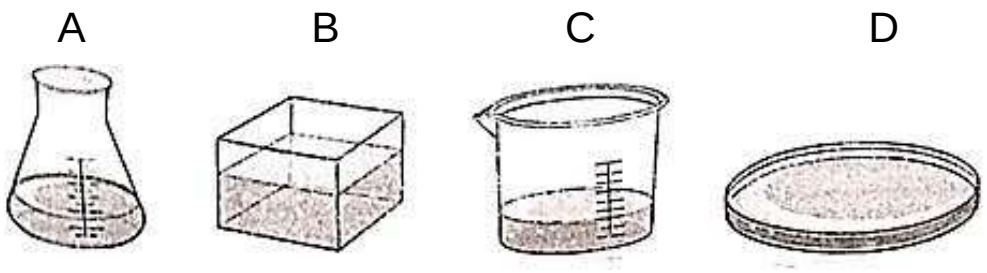
(ii) suspension

(b) Give two examples of such solution. [2]

(i) _____

(ii) _____

Q5. Students are testing how the shape of a container affects the rate of evaporation. They place four containers of water outside for 2 days.



Container	Volume of water start in ml	Difference of volume of water after 2 days in ml	Difference of volume of water evaporated in ml
A	150 ml	80	
B	150 ml	60	
C	150 ml	40	
D	150 ml	0	

(a) Complete the last column of the table. [4]

(b) In which container did the least amount of water evaporate? [1]

_____

(c) Suggest a reason why this happened? [1]

_____

(d) Was the test fair? Say why or why not? [1]

_____

(e) They repeated their test twice more and recorded their results in a table. Why do you think they repeated their test? [1]

_____