1. Short answer questions:

i. What is an element?

ii. What is an alloy?

iii. Define compound.

iv. What is sublimation?

2. Long Questions

i. **What is the composition of air?**

ii. **Why is an alloy considered to be a mixture not a compound?**

iii. **What are the differences between a compound and a mixture? Give two examples.**

Compound	Mixtures

iv. **Write the process of separation of salt from water.**

v. _____

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vi. **How is chromatography carried out?**

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3. Choose the correct answer

i. A mixture is considered homogenous if:			
a) It does not have a uniform composition throughout			
b) It has different properties in different parts of the mixture			
c) It has a uniform composition			
d) It has solid particles in liquid			
ii. Which of the following is classified as a mixture?			
a) Iron	b) Chlorine	c) Steel	d) Mercury
iii. Which of the following cannot be used to separate a mixture?			
a) Chromatography	b) Sublimation	c) Distillation	d) Decomposition
iv. The most common element in dry air is			
a) Oxygen	b) Nitrogen	c) Water vapour	d) Carbon dioxide
v. A mixture of sugar with water is an example of			
a) Homogeneous	b) Heterogeneous	c) Alloy	d) Suspension

4. Fill in the blanks

i. An element is made up of _____ type of atoms.

ii. Air is a _____ of gases.

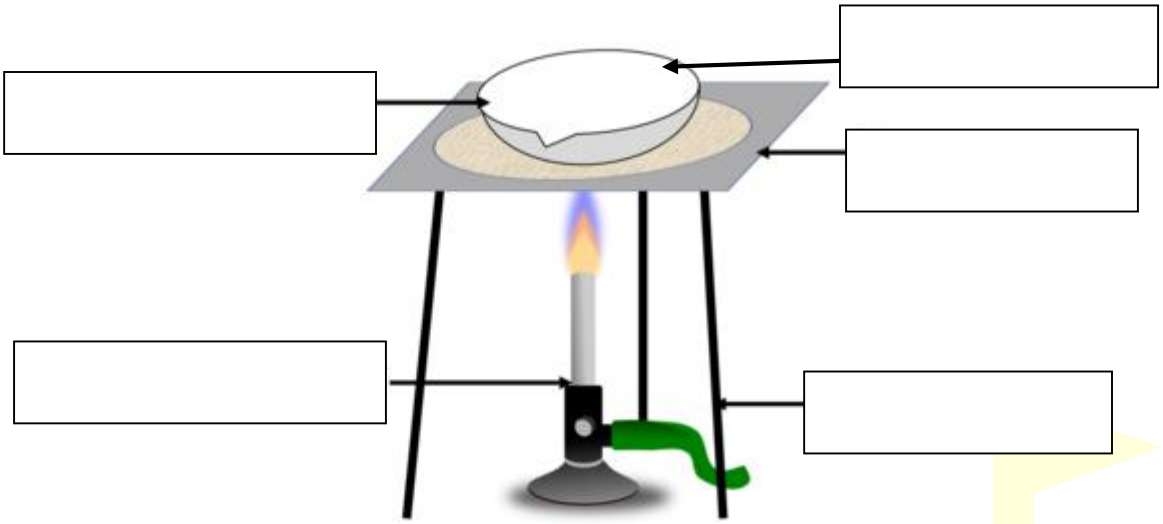
iii. The most abundant gas in the atmosphere is _____.

iv. Without _____ from the air, most living things would die.

v. Distillation is used to separate the _____ from a solution.

vi. A solid that dissolves in a liquid to form a solution is called _____.

5. Label the following diagram:



6. True/False

i. Mixtures can be separated into their components by physical means.

ii. The components of a mixture always retain their individual properties.

iii. In a solution, the solute is the substance in greater quantity.

iv. Heterogeneous mixtures do not have a uniform composition throughout

v. Air is an example of a mixture, consisting mainly of nitrogen, oxygen, and other gases.

7. Match the statements

A	B
Alloy	Separation method based on settling
Tyndall effect	Mixture of metals with enhanced properties
Decantation	Scattering of light by colloidal particles
Solute	Ability of a solution to conduct electricity
Conductivity	Substance being dissolved

8. Jumbled words.

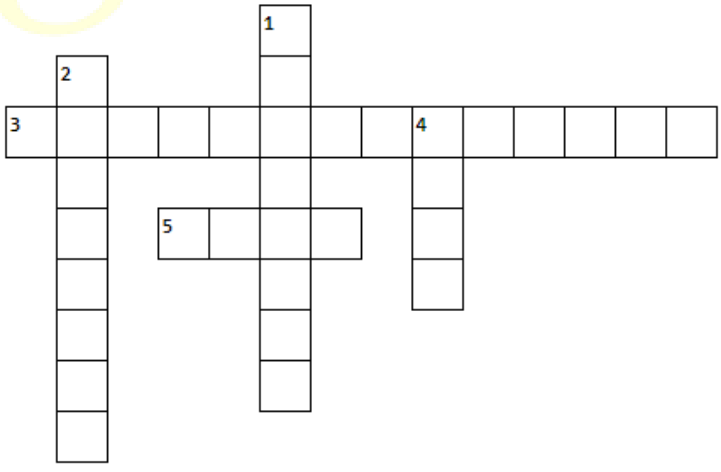
Jumbled words	Arranged words
alldtyn	
tteracs	
vitytiduccon	
quenitech	
tationcande	

9. Word Search

Aqueous	Emulsion	Saturation	Precipitate	Collision

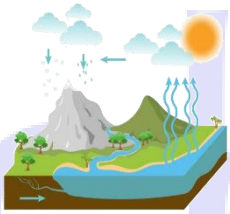
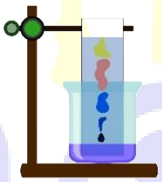
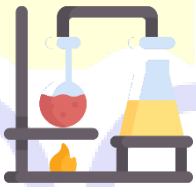
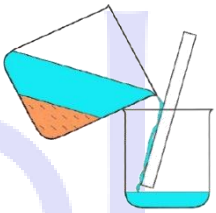
L	A	R	G	E	I	N	T	E	S	T	I	N	E	v
Q	P	C	Q	L	Y	I	F	L	A	G	P	O	L	E
V	F	A	E	S	H	B	I	P	H	P	W	Y	Q	A
T	B	R	M	P	A	N	C	R	E	R	S	T	J	L
M	A	Q	U	E	O	U	S	E	R	E	B	D	G	I
O	G	O	L	S	T	O	M	A	C	C	I	I	R	M
U	Z	H	S	A	T	U	R	A	T	I	O	N	A	E
T	Y	Y	I	G	U	T	N	G	T	P	P	E	V	N
H	I	D	O	A	N	C	E	J	I	I	U	S	I	T
M	I	R	N	V	W	G	U	L	L	T	T	T	T	A
I	S	A	J	G	L	A	N	D	S	A	L	L	Y	R
L	P	T	C	Y	A	P	P	E	N	T	I	X	L	Y
C	O	L	L	I	S	I	O	N	F	E	U	E	S	K

10. Cross words



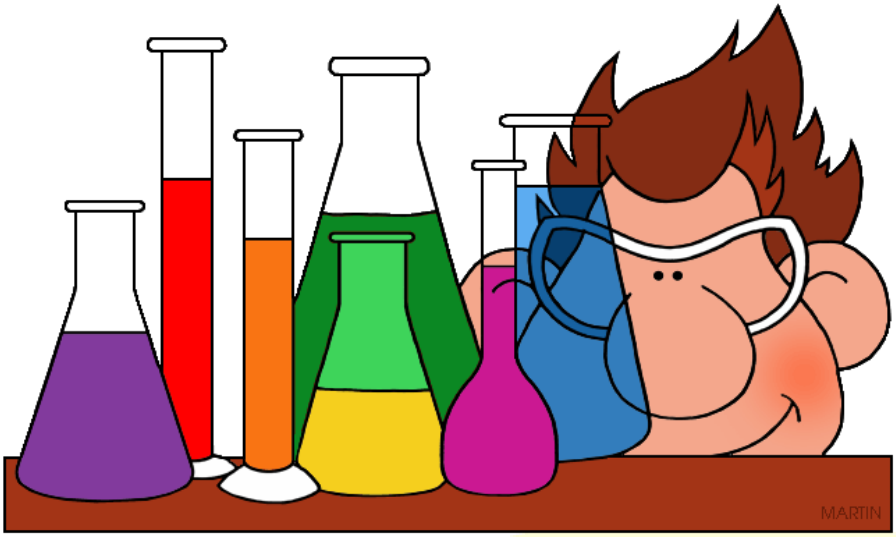
Across	Down
3. compound found in table salt	1. mixture of two or more elements
5. the basic unit of an element	2. solute, solvent
	4. metal used in pencils

11. Drag and drop

				
Filtration	**Evaporation**	**Paper chromatography**	**Distillation**	**Decantation**

Method	Use

12. Comprehension



Mixtures are combinations of different substances that come together but don't chemically react. They can be found all around us, like the air we breathe and the food we eat. There are two types of mixtures: homogeneous, where everything looks the same, like sugar dissolved in water, and heterogeneous, where you can see the different parts, like a bowl of cereal. We use various methods, such as filtering or heating, to separate these mixtures and get back the original substances. Understanding mixtures helps us make things, like cooking recipes or even creating new materials. So, next time you enjoy a smoothie or look at the clouds in the sky, remember that mixtures are part of our daily lives, making things interesting and diverse.

i. What are mixtures?

_____

_____

ii. How many types of mixtures are?

_____

_____

iii. What are the methods to separate mixtures?

_____

_____