THE VILLAGE
INTERNATIONAL SCHOOL
"We Nurture Dreams"

AIM HIGH, TOGETHER WE FLY

Worksheet

Grade 6- Science

Chapter 4- Separation of Substances

Choose the correct Answer:

1. Filtration is a method to separate the components of a
   (a) solution
   (b) mixture of a liquid and an insoluble substance
   (c) both (a) and (b)
   (d) pure substance

2. Which method is used to separate pebbles and stones from sand?

   (a) Handpicking
   (b) Winnowing
   (c) Sieving
   (d) Any of these

3. Sand from water is separated by
   (a) sieving

   (b) evaporation

   (c) filtration

   (d) sedimentation and decantation

4. The process of conversion of water vapours into liquid is called

(a) condensation

(b) decantation

(c) sedimentation

(d) evaporation

5. The property which forms the basis of sieving

(a) difference in weight

(b) difference in colour

(c) difference in shape

(d) difference in size

6. A heterogeneous mixture contains.

a. different size particles of same substance

b. particles of different substances

c. only one type of element

d. only one type of atom

7. 21. Paheli wants to write the reasons for separating mixtures into their compounds:

[a]. To obtain useful component.

[b]. To remove undecidable component.

[c]. To obtain the pure sample of a substance.

[d]. All of the above

8. If the saturated solution of a substance at a particular temperature is heated to a higher temperature then the solubility of a substance.

[A]. Increase

[B]. Decrease

[C]. Remains same

[D]. Little decrease

9. 22. In a solution of salt and water, no more salt can be dissolved. If we want to add more salt, it needs to be.

[A]. Shaked well

[B]. Filtered

[C]. Alum has to be added

[D]. Heated

10. Paheli bought some vegetables such as French-beans, lady's finger, green chilies, brinjals and potatoes all mixed in a bag. Which of the following methods of separation would be most appropriate for her to separate them?

[A]. Winnowing

[B]. Sieving

[C]. Threshing

[D]. Hand-picking

11. At water treatment plants, the river water is filtered by using

(a) filter paper

(b) porcelain filters

(c) cloth filters

(d) sand filters

12. When no more salt dissolves in water at a particular temperature, then the solution at that temperature is called

(a) unsaturated

(b) saturated

(c) supersaturated

(d) none of these

13. Why do we separate impurities from water to obtain pure water?

a). To remove unwanted substances

b). To get a pure substance

c.) To get a useful substance

d.) To enhance its taste

14. How is salt typically obtained from seawater?

a. By evaporating the seawater

b. By churning the seawater

c. By using a sieve

d. By adding more impurities

15. How are tea leaves separated from tea?

a). By evaporating the tea

b) By adding sugar to the tea

c) By using a strainer

d) By boiling the tea leaves

16. What is the term for the process of carefully pouring out the clear liquid from the top of a container without disturbing the settled sediment?

a) Decantation

b) Distillation

c) Filtration

d) Precipitation

Fill in the blanks:

17. Fine sand can be separated from larger particles by ……. .

18. ……. is used to separate husk from wheat with help of wind.

19. The process of separation of heavier particles is called _____.

20. Separation of components is done to obtain a …… substance.

21. All substances are divided into _____ and _____ substances.

22. Tap water is a mixture of _____ and other _____.

23. A mixture of powdered sugar and powdered salt is an example of a _____ mixture

24. We get pure metals when we separate impurities from their _____.

25. Stones and pebbles are separated from sand, at the construction sites, by _____.

26. ……. substance contains particles of only one type.

27. ……. and ……. are the types of mixtures.

Choose the correct statement:

28. The different substances present in a mixture are called its components.

29. The individual components in a homogeneous mixture can be easily differentiated.

30. In a mixture of powdered sugar and powdered salt, the sugar and salt cannot be differentiated.

31. Soil is a homogeneous mixture.

32. Evaporation is the process of converting liquid into its vapour form.

33. Evaporation cannot be used to separate a soluble solid from a liquid, such as getting salt dissolved in

seawater.

34. Allowing water to evaporate in bright sunlight is a quick process.

35. The salt that is left behind after evaporation does not need to be processed before consuming.

Unscramble the letters to form meaningful words with the help of the clues given.

36. Made of two or more pure substances that are mixed together—TIUMRXE:

37. Is the removal of the clear layer of the liquid without disturbing the settled

solids—NADCEOITATN:

38. The liquid in which the solute dissolves—VESNLTO:

39. Cannot mix homogeneously—IIILSMCBEM:

Who am I?

40. I am a very precious mixture. You get valuable fuels by separating me.

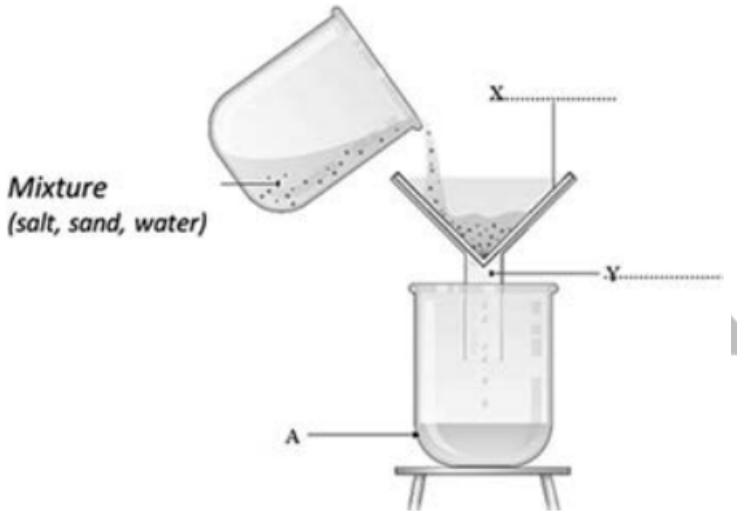
41. I am the process to separate peanuts from chick peas.

42. I am used for removing magnetic substances from a mixture.

43. I attach myself to dirt particles and make them stick together.

44. I am a porous material used for separating fine insoluble solids from a liquid–solid mixture.

Mark the labels X and Y. Answer the questions given below.



45. What process is shown in the above figure?

46. What is 'A'?

(i) pure substance (ii) solvent (iii) solution

47. If it is a mixture/solution, what are the components?

48. If it is not a pure substance, how will you get the pure substance(s) from it? Name the process and the substance obtained.

49. Fill in the boxes to show the sequence of actions to get pure liquid from a solution.