

7H Solutions

Extension questions

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Answer the following questions:



Click mouse to reveal answer

- Q1. What is the most common solvent, necessary for life, called?
- Q2. Name a solvent that is also used as a fuel for cars?
- Q3. What do you call two or more substances which are together but not chemically combined?
- Q4. What do you call a liquid that contains a dissolved solid?
- Q5. What do you call a substance that can dissolve in a liquid?
- Q6. What do you call the liquid in which a substance can dissolve?
- Q7. What do you call a substance that cannot dissolve in a particular liquid?
- Q8. What process do we use to separate colours in an ink, for example?
- Q9. Name an alcohol present in beer, wine and spirits?
- Q10. Name the mixture of gases that forms the Earth's atmosphere?
- Q11. What do you call a solution when no more substance will dissolve in it?
- Q12. What process do we use to separate liquids which have different boiling points?
- Q13. What process do we use to separate insoluble solids from a liquid?
- Q14. What do we call the amount of a substance that dissolves per litre of solvent?
- Q15. Name a chemical compound that has a sweet taste?

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Answers:

A1. Water

A2. Petrol

A3. Mixture

A4. Solution

A5. Soluble

A6. Solvent

A7. Insoluble

A8. Chromatography

A9. Ethanol

A10. Air

A11. Saturated

A12. Distillation

A13. Filtration

A14. Solubility

A15. Sugar



Click mouse to reveal answer

1: What is the definition of a solvent ?

- A A solid that is dissolved
- B A liquid that dissolves a solute
- C A mixture of two solutes
- D A solution that has been warmed

2: Which is the best way to dissolve more solute in a solvent ?

- A Cool the solvent
- B Stir the solvent
- C Warm the solvent
- D Crush the solute

3: When no more sugar dissolves in water at a fixed temperature it is said to be ?

- A Complete
- B Finished
- C Crystallised
- D Saturated

4: If you dissolve 45g of sugar in 100g of water, the sugar solution would weigh ?

- A 100g
- B 55g
- C 145g
- D 190g

1: What is the definition of a solvent ?

A

B A liquid that dissolves a solute

C

D

2: Which is the best way to dissolve more solute in a solvent ?

A

B

C Warm the solvent

D

3: When no more sugar dissolves in water at a fixed temperature it is said to be ?

A

B

C

D Saturated

4: If you dissolve 45g of sugar in 100g of water, the sugar solution would weigh ?

A

B

C 145g

D

Answer all the questions below:



Click mouse to reveal answer

1) Unscramble the following words:

tesolu

vesolnt

usfidifon

olulsbe

2) Make three sentences using the following nine words or phrases:

a solute
keep adding more
separate solute

dissolves in a solvent
solute
from solution

forming a solution
becomes saturated
evaporation

3) Match the word or phrase with the right meaning:

Diffusion



When no more solute will dissolve in a solvent

Saturated



A substance that will not dissolve in an solvent

Insoluble



Spreading out of a substance in a gas or liquid

Answer all the questions below:

1) Unscramble the following words:

solute

solvent

diffusion

soluble

2) Make three sentences using the following nine words or phrases:

a solute
keep adding more
separate solute

dissolves in a solvent
solute
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3) Match the word or phrase with the right meaning:

Diffusion

Spreading out of a substance in a gas or liquid

Saturated

When no more solute will dissolve in a solvent

Insoluble

A substance that will not dissolve in an solvent

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complete the sentence

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Place the right word or words to complete the sentence:



Click mouse to reveal answer

dissolves

boiling

test

salt

evaporate

temperature

solute

saturated

ink

- a) When a solid _____ to form a solution, the mass of the solid and the liquid is conserved.
- b) A solvent is a liquid that dissolves a _____ forming a solution.
- c) A solution is _____ when no more solute will dissolve in the solvent.
- d) Chromatography separates materials like _____ based on their relative solubility.
- e) Chromatography can be used to _____ for banned drugs in an athlete's blood.
- f) Salt solution contains dissolved _____ and a liquid, normally water.
- g) A way of separating dissolved salt from its solvent is _____ off the solvent.
- h) As you increase the _____ of a solvent it will dissolve more solute.
- i) Distillation involves _____, collecting and condensing.

complete the sentence

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Place the right word or words to complete the sentence:

dissolves

boiling

test

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ink

- a) **When a solid dissolves to form a solution, the mass of the solid and the liquid is conserved.**
- b) **A solvent is a liquid that dissolves a solute forming a solution.**
- c) **A solution is saturated when no more solute will dissolve in the solvent.**
- d) **Chromatography separates materials like ink based on their relative solubility.**
- e) **Chromatography can be used to test for banned drugs in an athlete's blood.**
- f) **Salt solution contains dissolved salt and a liquid, normally water.**
- g) **A way of separating dissolved salt from its solvent is evaporate off the solvent.**
- h) **As you increase the temperature of a solvent it will dissolve more solute.**
- i) **Distillation involves boiling, collecting and condensing.**