Reading Guide
Mixtures

This worksheet refers to the 'Queensland Junior Science' website. Read the notes entitled 'Mixtures' before answering the questions.

Overview

1. Find out what the word 'soluble' means. What would a scientist do to figure out if a chemical was soluble or insoluble?

2. On the right side of the diagram, there are 3 types of insoluble mixtures. 'Floating' means 'found at the top'. 'Sinking' means ' found at the bottom'. What do you think 'suspended' means?

3. An everyday example of a substance that floats is oil on top of water when you wash up a greasy saucepan. What are examples for 'suspended' and 'sinking'?

Solubility Terms

4. Read the note about 'Dissolve'. When salt dissolves in water, where does it go? How can you tell if there is still salt in water if you can't see it?

5. What is the difference between a solution, a solute and a solvent?

6. We know that solids such as salt and sugar dissolve in water. Is a solution always made of a solid dissolving in a liquid?

7. Read the note about 'Solubility'. Does all substance dissolve equally? How can you make more of something dissolve?

8. A chocoholic loves chocolate. Would a chocoholic make a chocolate drink that is dilute or concentrated?

Crystals

9. Read what crystalline and amorphous substances are. In terms of how they are made, what is the difference between them?

10. Do you notice in the instructions to grow crystals that personal words such as ‘ I, we and he’ are not used. What other personal words are not used when writing scientific procedures?

Separation of Mixtures

11. Two of these methods for separating mixtures separate soluble and insoluble substances only. Look for the words ‘soluble’ and ‘insoluble’ to figure out what these 2 are.

12. What method is used to make drinking water?

13. The word ‘chromatography’ comes from the Latin root meaning ‘colour’. What does chromatography separate?

14. A centrifuge separates heavy from light substances by spinning. What centrifuge do you have at home?

15. What are the 3 chemicals that are attracted to a magnet?