

Separating mixtures 1

Name _____

Class _____

? Fill in the gaps in these sentences, using the words in the boxes. You may need some words more than once.

1 Filtering can separate a solid which does not _____ (like sand) from a _____ (like water). Filtering will not separate a dissolved solid (like _____) from water. Particles of _____ are trapped in the _____, and the liquid goes through the _____.

dissolve
filter paper
liquid
salt
solid

2 Evaporating can separate a _____ solid (like salt) from water. The mixture is _____ until all the water has _____. The _____ is left behind.

dissolved
evaporated
heated
salt

3 Distilling can separate a _____ from a dissolved solid. You can use distillation to get _____ water from salty water, or pure _____ from inky water. Distillation can also separate a mixture of different _____. The mixture is heated until the liquid _____. The gas is collected and _____ down so that it _____.

condenses
cooled
evaporates
liquid
liquids
pure
water

4 Chromatography can separate different chemicals, such as different _____ in ink or _____. Spots of different dyes are put on a piece of _____ paper, and the paper is put into a liquid. If the dyes dissolve in water then _____ can be used for the liquid. If the dyes do not dissolve in water a different _____, such as _____, must be used.

dyes
ethanol
filter
food colouring
liquid
water

Dissolving key words

Name _____ Class _____

? 1 Fill in the spaces using words from the box.

a Salt is a solid which _____ in water.

b Salt water is a _____.

c We can see through salt water. A word to describe this is _____.

d Solids, like salt, which dissolve in water are _____.

e Chalk does not dissolve in water. It is _____.

f When you mix chalk with water, the liquid turns _____.

g When you mix sugar with water, the _____ is the solute and the _____ is the solvent.

2 Using words from the box, write down:

a the name of a soluble solid _____

b a word which means the same as transparent _____

c a word that could describe orange squash _____

d the name of a solvent _____

clear

cloudy

dissolves

insoluble

soluble

solution

sugar

water

S knowledge, literacy

Name _____

Class _____

Filtering is used to separate a solid from a liquid.

Filtering will not separate a solid that has dissolved in the liquid.



1 Look at this list of mixtures. Circle the ones which can be separated by filtering.

salt and water

flour and water

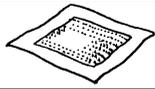
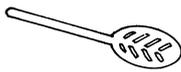
sand and water

sand and milk

sugar and water

sugar and milk

2 Filters can be used when you are preparing food. Fill in the missing spaces in this table. The first two have been done for you

Equipment	Does it filter?	What goes through the 'filter'?	What is trapped in the 'filter'?
Teabag 	yes	water and dissolved tea	tea leaves
Saucepan 	no	–	–
Slotted spoon 			
Chip basket 			
Rolling pin 			
Flour sieve 			

Answer these questions in your book.

3 In the table, the things that filter have different sized holes. Explain why the teabag has different sized holes to the chip basket.

4 Imagine that you have a friend who has never seen a teabag.

a Explain how a teabag works and what it separates.

b Describe what a cup of tea is like if the teabag breaks.

S knowledge