

## KEYWORDS

Match the keywords from this unit to their definitions ...

MIXTURE	A solution becomes this when no more solid will dissolve in it
SOLUTE	If a solute does not dissolve in a solvent then it is....
SOLVENT	Two or more substances 'jumbled up' together
SOLUTION	Method used to separate solids that are soluble in a particular liquid
SOLUBLE	When a liquid changes into a gas
INSOLUBLE	A solid that dissolves
DISTILLATION	A liquid that does the dissolving
EVAPORATION	If a solute dissolves in a solvent then it is...
CONDENSATION	Can be used to identify an unknown substance
CHROMATOGRAPHY	Method used to separate a soluble solid from a liquid
CHROMATOGRAM	When a gas changes into a liquid
SATURATED SOLUTION	Formed when a solute completely dissolves in a solvent

## EXTRACTING SALT

Read this passage and then answer the questions below.

In very hot countries salt is extracted directly from sea water. Sea water is mainly a mixture of water and sodium chloride or salt. The sea water is trapped in huge shallow pools where heat energy from the Sun evaporates away the water to leave behind the salt. This method of salt production is not used in this country. In this country salt is usually found naturally underground as deposits of rock salt. Rock salt is a mixture of salt and rock such as sandstone. Rock salt mining involves boring shafts down to the rock salt. Using cutters and explosives a mine is then worked in the rock salt in order to extract it. It is then brought to the surface where it is crushed and in this form it is used on the roads in the winter to prevent the formation of ice during very cold weather. Another method is solution mining where water is pumped down a well which has been drilled into the rock salt. The salt dissolves in the water to form salt water which is then pumped back up to the surface. The water is then evaporated to leave behind the salt.

1. What is a) the solute and b) the solvent in sea water?
2. Why is the sea water trapped in 'huge shallow' pools and not in 'small deep' pools?
3. Why do we not extract salt directly from sea water in this country?
4. What are the dangers of obtaining rock salt by mining?
5. What problems are there once a rock salt mine has been closed down?
6. What a) advantage and b) disadvantage does rock salt mining have over solution mining?