

Draw a particle model for each of the three states of matter.

solid	
liquid	
gas	

List **five** physical properties of a solid.

1. _____
2. _____
3. _____
4. _____
5. _____

Name an example of a solid:

List **five** physical properties of a liquid.

1. _____
2. _____
3. _____
4. _____
5. _____

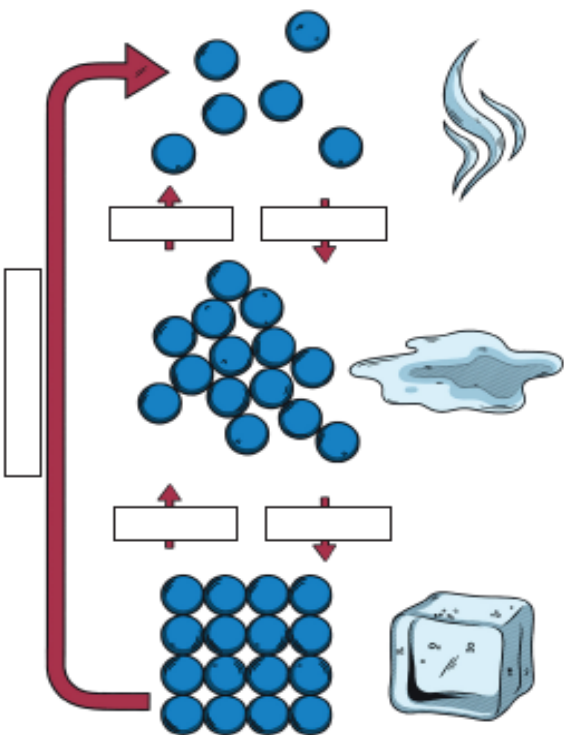
Name an example of a liquid:

List **five** physical properties of a gas.

1. _____
2. _____
3. _____
4. _____
5. _____

Name an example of a gas:

Complete the diagram by writing the change of state represented by each arrow.



Use the particle diagrams you have drawn in question 1, and the words below, to complete the explanation of why a solid cannot be compressed but a gas can.

Use all the words below to complete the explanation.

solid compressed space particles gas

Complete this revision mat either on paper or in your book.

The properties below describe an unknown material.

The material can flow.
The material has a variable shape.

Which state of matter is the material? Explain your answer.

Amari suggests the material is a liquid. Explain how she might test whether the material has a fixed or variable volume.

Declan and Raj had been camping. The next morning, the inside lining of the tent was wet.

The overnight temperature was 6°C and it had not been raining.

Explain what had happened.

A drop of ink is added to a container of water, eventually the ink spreads evenly throughout.

What is the name of this process?

Explain how it happens.



What is a mixture?

The grid below shows some examples of different types of mixtures.

Complete the grid using the examples below:

- air
- solutions, e.g. salt water
- smoke

	gas		
gas		liquid	
liquid	aerosols and foams	solutions, e.g. beer	
solid			solid
			metal alloys

Which separation technique is shown below?



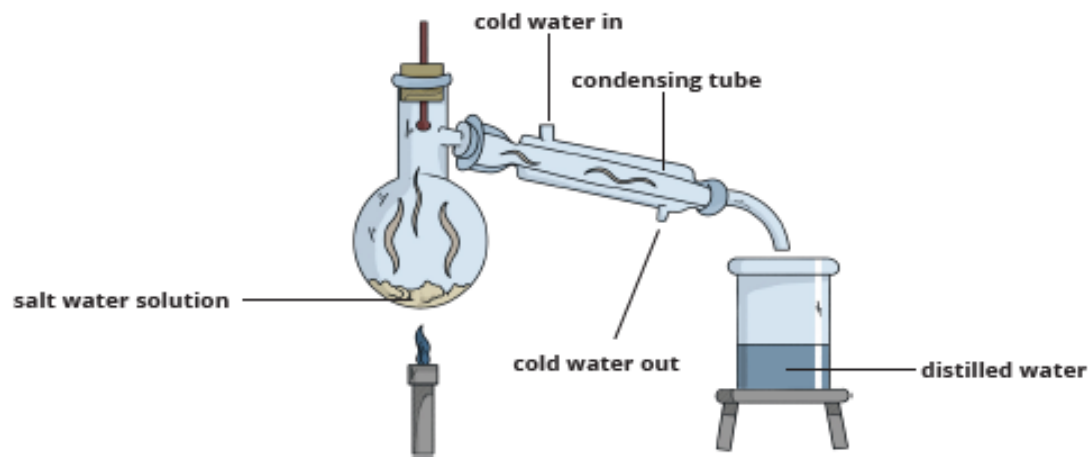
Use the words below to describe this separation technique.

filtrate insoluble liquid residue solid

Which separation method would be used to separate the different dyes in ink?

Explain how this separation technique works.

Use the diagram below to answer the questions.



What is the name given to this separation method?

Name the solvent.

Name the solute.

Write the definition for each keyword.

soluble: _____

solvent: _____

solute: _____

solution: _____

Describe a method for separating pure salt from a rock salt mixture.