

S1 Science

1. States of Matter



Water can exist in all 3 states of matter.

As a solid we call it ice, as a liquid we call it water and as a gas we call it water vapour or steam.

Using water as your example *explain* and *describe* what happens to the arrangement of the particles and the speed they move when ice is melted until it boils.

(Hint - A diagram may be helpful!)

3. Solutions



1. *Explain* each of the words below:
solute, solvent, solution

2. *Describe* how you could separate a solvent from a solute?

3. Crystals can be made using copper sulphate.

State the word you would use to describe this and *give a reason why* it does not dissolve.

4. What difference does heating water make to the mass of solid which will dissolve in it?

States of Matter Homework

2. Changes of State

1. *Explain* what happens to the size of a substance when it is heated?

2. *Describe* what happens to the size of a substance when it cools? Explain why this happens.

3. *Explain* why it is important to measure the temperature as well as the volume of the petrol carried in a tanker.

4. Separating Mixtures

1. Why can mixtures be separated easily?

2. Describe how a builder could separate chips of bark from gravel.

3. What kind of substances can be separated by filtration?

4. Describe how a mixture of ink can be separated using chromatography.

