

Name:

Class:



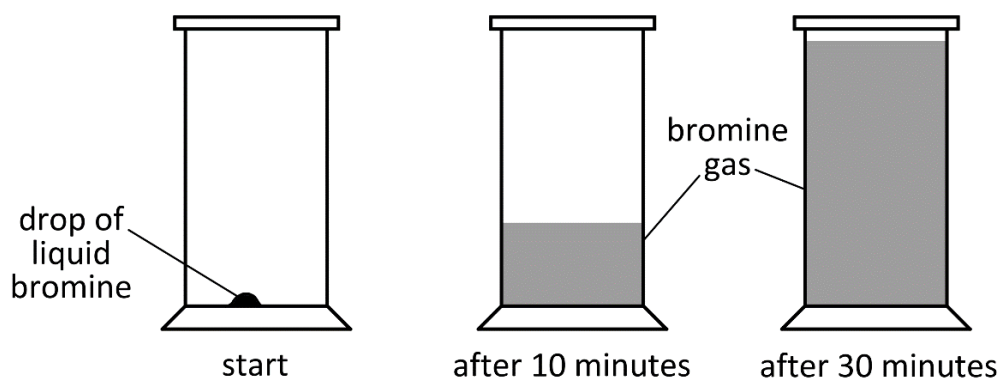
Give the formula for hydrochloric acid.

HCl

What is a solvent?

A fluid in which a solute is dissolved

A drop of bromine was put at the bottom of a jar and a lid placed on the jar. The bromine turned into a pale red gas which spread through the jar in about 30 minutes.



- i. Give the name to the change of state from liquid to gas.

Evaporation

- ii. Explain, in terms of particles, why the bromine gas is a much paler red colour than the liquid.

As in a gas, the particles are further apart. This means that more light can pass through bromine gas.

- iii. Give the name which is used to describe the spreading out of a gas.

Diffusion

- iv. Explain why the gas spreads out.

Gas particles move from an area of high concentration to an area of low concentration as they are in **constant, random motion.**

- v. Suggest why the gas spreads out quite slowly.

There are air particles in the way. This slows down the rate of diffusion.

Complete the following table by identifying the elements.

Symbol	Ca	Ar	Zn	Hg	Ti
Name of element	Calcium	Argon	Zinc	Mercury	Titanium

A student needs the formula for the compound containing calcium ions (**Ca²⁺**) and hydroxide ions (**OH⁻**). What should they write?

Ca(OH)₂