

Name:

Class:



Complete the following definitions:

An atom is: **the simplest particle of an element that is neutral.**

A compound is: **a substance formed when two or more different elements are chemically bonded together.**

Describe a test, and its positive result, to show that a substance is water.

Test: Add anhydrous copper(II) sulfate.

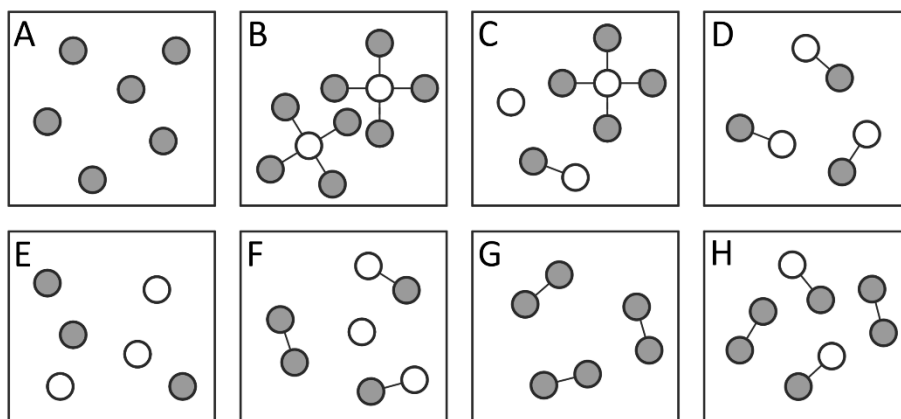
Result: If water is present a colour change from white to blue is seen.

Accept the use of blue anhydrous cobalt(II) chloride. This turns pink in the presence of water.

Complete the word equation:



Each circle represents an atom; circles of the same colour are atoms of the same element. A line between two atoms represents a chemical bond.



- Which diagrams represent pure substances? **A, B, D, and G.**
- Which diagram represents a mixture of one compound and two elements?
B
- Which diagram represents an element made from molecules? **G**

Give the formulae for the following.

Sodium chloride	NaCl
Ammonia	NH₃
Magnesium chloride	MgCl₂

Describe a test to show that a gas is chlorine.

Test: moist/ damp blue litmus paper.

Result: the damp blue litmus paper will turn red and is then bleached white.

Is pure copper an element, compound, or mixture?

Element.