

DAY 3**TOPIC: ELEMENTS AND COMPOUNDS.**

Aims :


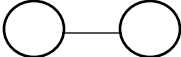
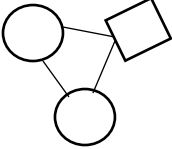
- Explain what an element is.
- Explain what a compound is.
- Differentiate between an element and a compound.

Notes:

Elements are substances made up of only **one type of atom**. Some elements exist as atoms and some exist as molecules. Elements cannot be broken down or chemically changed into different elements.

Compounds are substances made up of **two or more different elements joined together by chemical bonds**. They must therefore be made of molecules.

If we were to represent particles, using shapes, to help us understand.

Particle	Atom or molecule	Elements or compound	Reason
	Atom	Element	Atom, Because it is a single (one) particle. Element because it is made of only one type of atom.
	Molecule	Element	The two circles show that it is made up of not a single (one) particle, but it is made up of 2 particles (atoms) and the line connecting the 2 circles, shows that the 2 particles (atoms) are chemically connected together. This agrees with our definition of molecules. All particles are circles, showing that it is made up of only one type of atom. Therefore it is an element.
	Molecule	Compound	Molecule, because it is not a single particle (atom). It is made of 3 particles (atoms) and the particles are chemically joined together. It is made up of two different shapes (circles and squares) showing that it is made of two different atoms. Therefore it is a compound.

Activity:

Study the diagrams below (diagrams 1-25). Under each diagram, indicate whether it is an atom of an element, molecule of an element or a molecule of a compound.

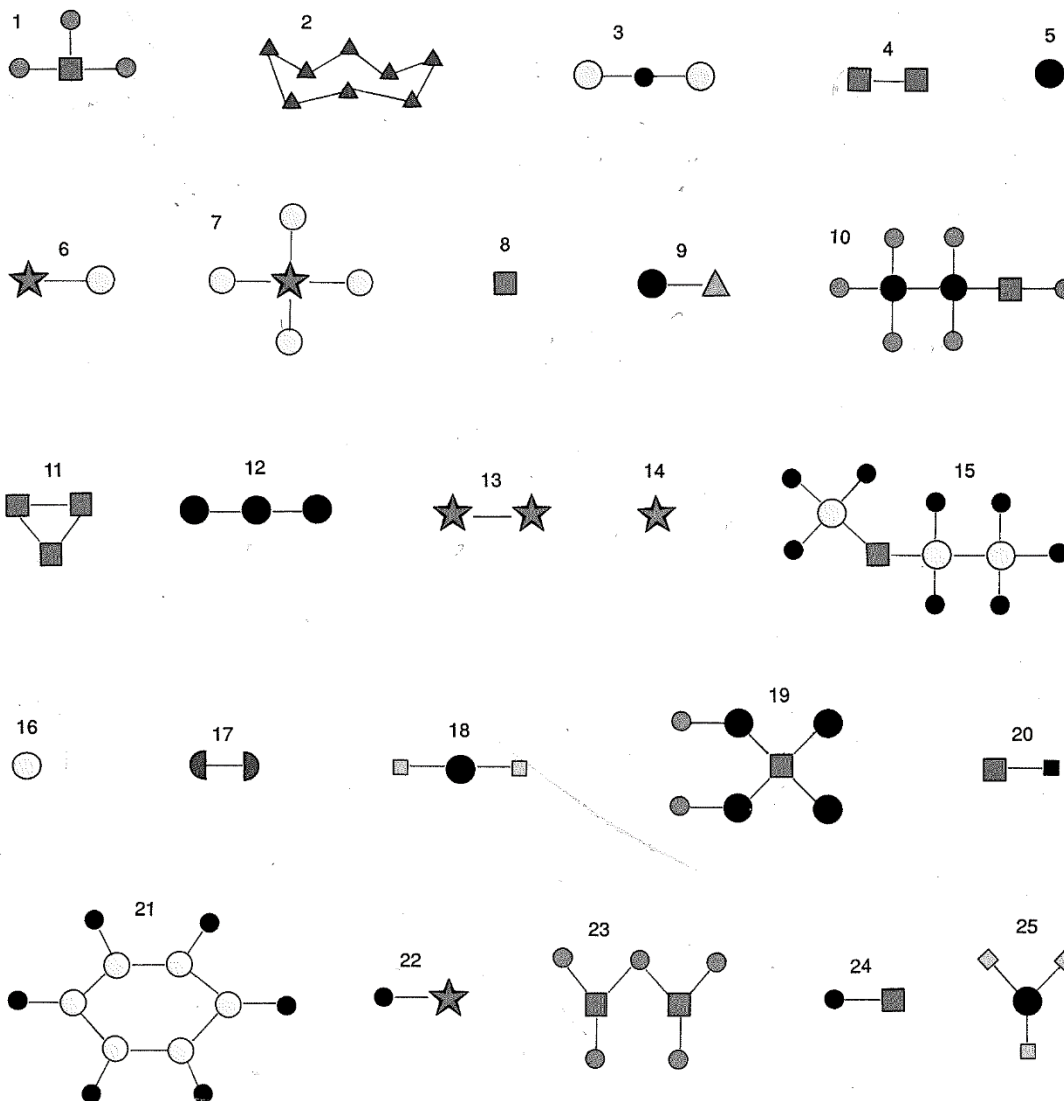


Fig 22.1 Atoms and molecules