Chemistry for the IB Diploma Programme





Guiding Question revisited

How can we model the particulate nature of matter?

In this chapter we have used a particulate model to show:

All matter is made up from small particles.
An element is a pure chemical substance composed of the same type of atoms.
Compounds consist of atoms of different elements chemically bonded together in a fixed ratio.
Mixtures are made from particles of one substance interspersed between particles of at least one other substance. If this mixing is uniform, it is a homogeneous mixture. If it is not uniform, it is heterogeneous.
The different states of matter are characterized by the movement and arrangement of the particles.
Changes of state require energy changes as energy is needed to separate particles and is given out when particles come together.