

Structure of Matter

WHAT IS MATTER?

Anything that occupies space and has mass is matter. It includes all substances of which the universe is made of.

What is not matter?

Feelings of love or sadness do not occupy space and do not have any mass.

Radio or TV sets, or cell phones are matter. But the signals they receive are not.

Can you think of some
other things that are not matter?



Take a paper and make it into small pieces.

Atoms

Atoms are so small that they cannot be seen even by the most powerful microscope.

Approximately, 40 lakh gold atoms, placed end to end, form a line only 1 mm long!



1) All matter is made of atoms. Atoms are indivisible and indestructible.

2) Compounds are formed by a combination of two or more different kinds of atoms.

3) A chemical reaction is a rearrangement of atoms.

But the smallest particle of water is not a water atom. Why?

This is because water is made up of two different kinds of atoms, the atoms of hydrogen and atoms of oxygen.

The smallest particle of water contains two atoms of hydrogen and one atom of oxygen.

These form one molecule of water.



