

GENERAL INTRODUCTION TO SCIENCE AND CHEMISTRY

SCIENCE

What is science?

Science is any knowledge arranged in an orderly manner. So that anybody can learn it.

But in a special way; science is a knowledge obtained by:

1. Observation
2. Testing fact in experiments

One who studies science is called a scientist.

A man scientist always observes things the meets.

A scientist also test or conducts experiments.

A scientist also asks questions like why? Or how

For instance; Galileo asked himself why oranges fall down from any orange trees. Why don't they go up?

A scientist not only asks questions but also find out the answers of those questions.

CHEMISTRY

What is chemistry?

Chemistry is a science (ie it is a knowledge obtain by observation and testing or (Experiments so chemistry is a science just like biology and physics)

Or

Chemistry is a branch of science which deal with the composition and behavior of matter.

CHEMISTRY BIOLOGY AND PHYSICS

Let us look at the definitions of these three subjects the definition which will enable us to distinguisher one subject from the other.

What is biology?

Biology is a branch of science which deals with the living things

What is Physics?

PHYSICS is a branch of science which deal with the matter and energy

We know already from above what is matter now energy. Energy is for example heat, light, sound. These are different forms of energy. So in physics we are studying the way matter in related to energy.

MORE ABOUT CHEMISTRY

In the above definition of chemistry there are three important words (or key words) Composition, behavior and matter

What is matter? *Matter is anything that occupies space and has mass.*

So your pencil is matter
your socks is matter
your watch is matter
your nail is matter

So chemistry studies all the substances around us. When chemistry looks at the substances around us. It observes how these substances are made. I.e. then composition.

The word composition here means *the way something is made.*

E.g.: The composition of water is H₂O there is Hydrogen & oxygen

The composition of table salt is sodium & chlorine

The composition of cabondioxide is O₂ there is cabon & oxygen

Chemistry also observes the behavior of matter. Behavior here means character properties. Chemistry observes the change the actions of matter. *Eg: oxygen helps fire to increase in size.*

(ie) It supports burning)

By studying the composition and behavior of matter. Chemistry can make new thing like fertilizers, medicines, tires, shirts etc.

A person who is an expert in chemistry is called chemist. We form 1 students are not chemists because we are not yet expects in chemistry. We are chemistry students.

Things that chemistry does or tries to do to find out something are called Experiments. Experiments are usually done in a special science room called the laboratory (in shirt lab) these are special materials or substance a chemist in experiments they are called chemicals.