



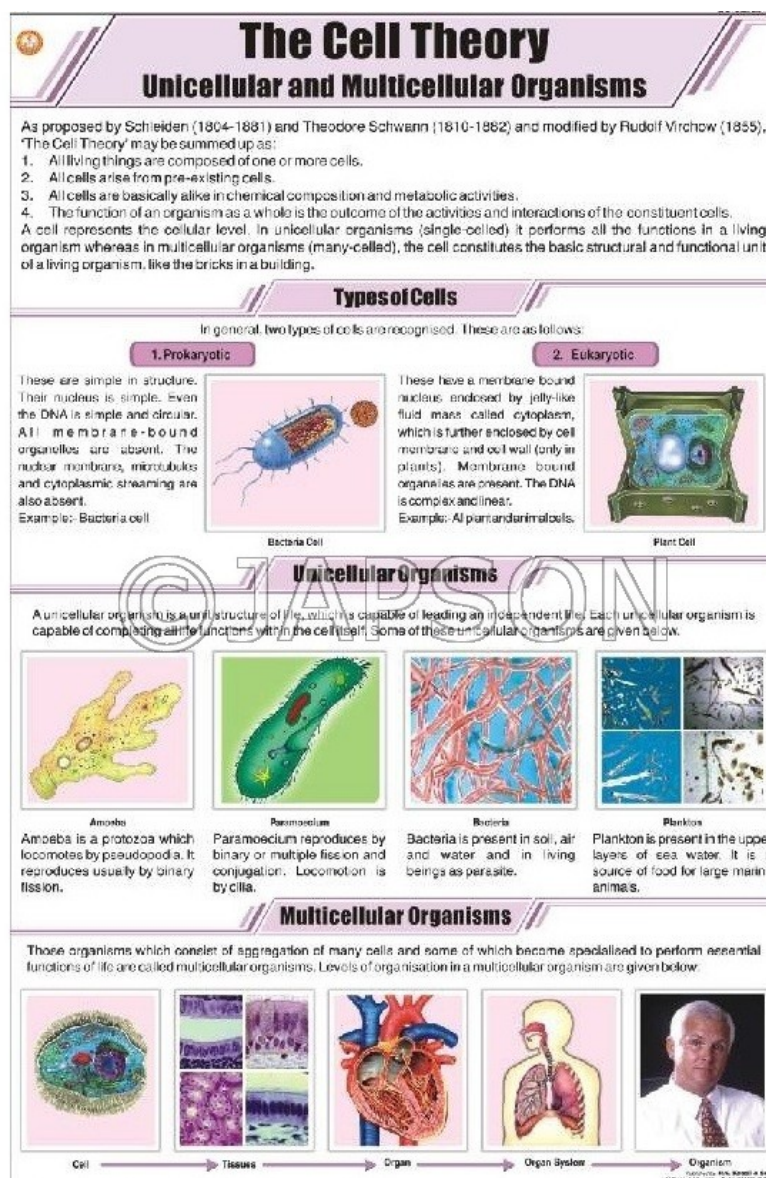
Address:
JAMBU PERSHAD & SONS
6275/22 Nicholson Road,
Ambala Cantt, Haryana,
INDIA
Pin: 133001

Email:
sales@japson.com
japsonambala@yahoo.com

Website:
www.japson.com
Phone:
+91-171-4006897

General Science (I) Charts, School Education

Product Image



Description

Standard Size: 58x90cms

Language: English

Laminated Paper Charts with Plastic Rollers. These Charts have technically accurate and detailed description in vivid colours.

Note: Based on minimum order quantity conditions, Charts can be customized to your requirements in terms of CONTENT, LANGUAGE, SIZE, etc. Please write back to us for discussion.

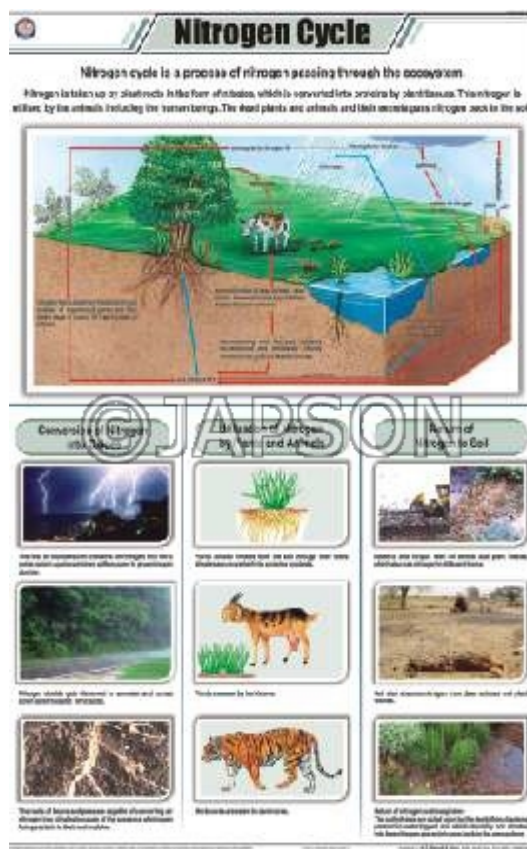
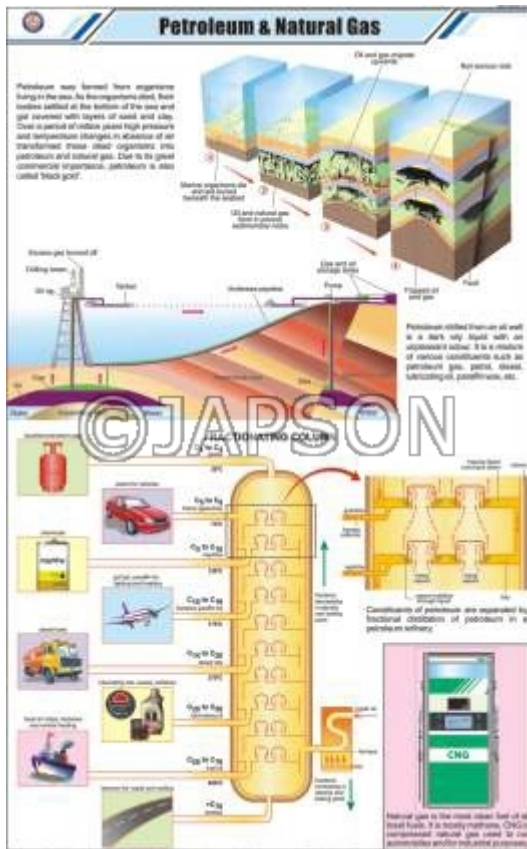
A. Charts, Basic Agricultural Practices



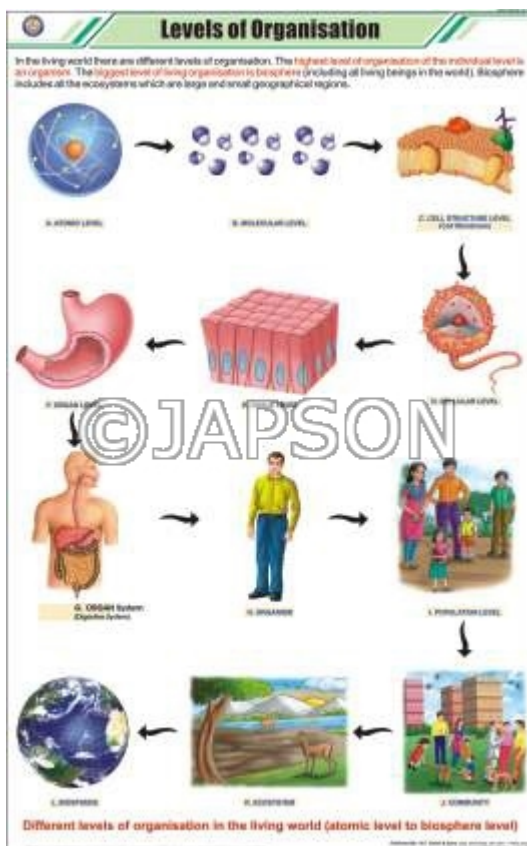
B. Charts, Renewable Sources of Energy



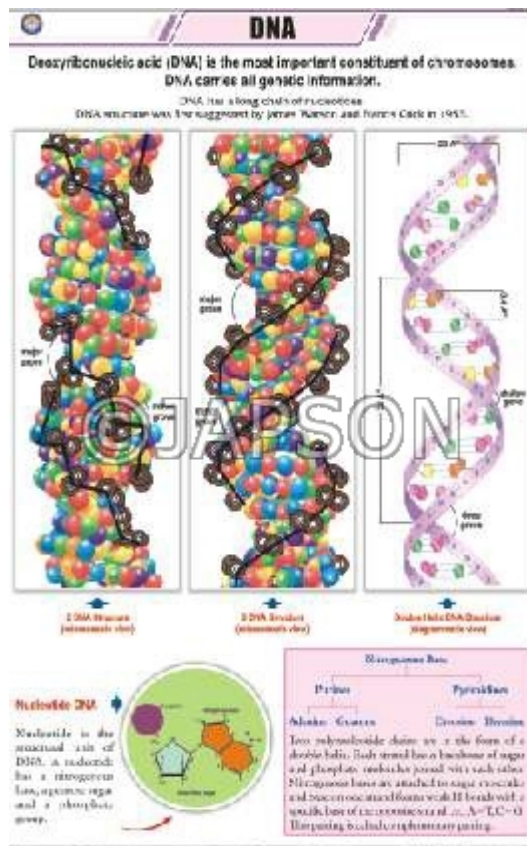
C. Charts, Petroleum & Natural Gas D. Charts, Nitrogen Cycle



E. Charts, Levels of Organisation

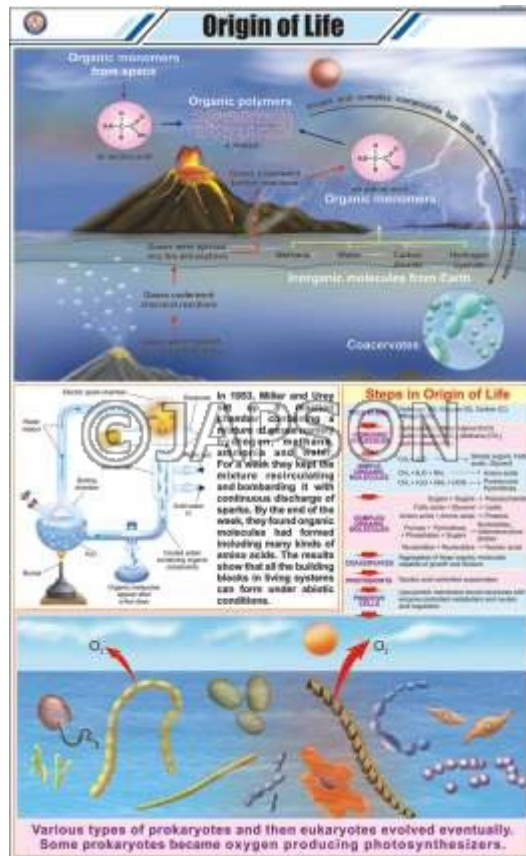
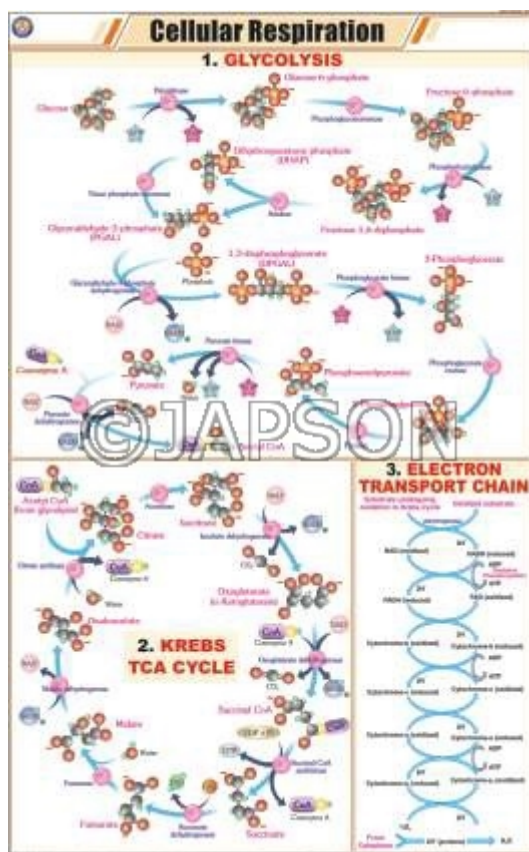


F. Charts, DNA



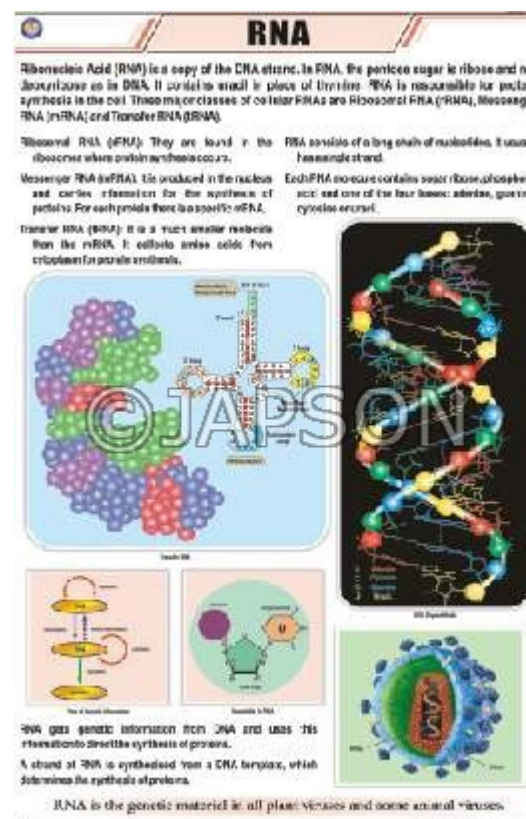
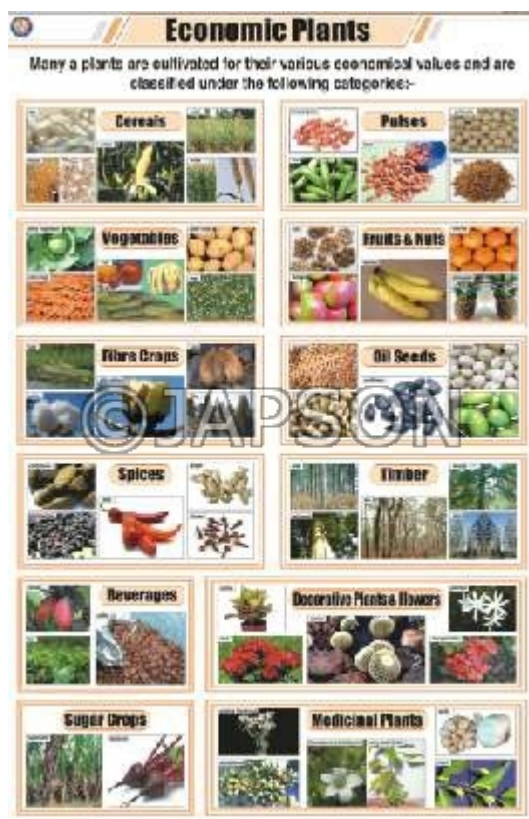
G. Charts, Cellular Respiration

H. Charts, Origin of Life



I. Charts, Economic Plants

J. Charts, RNA



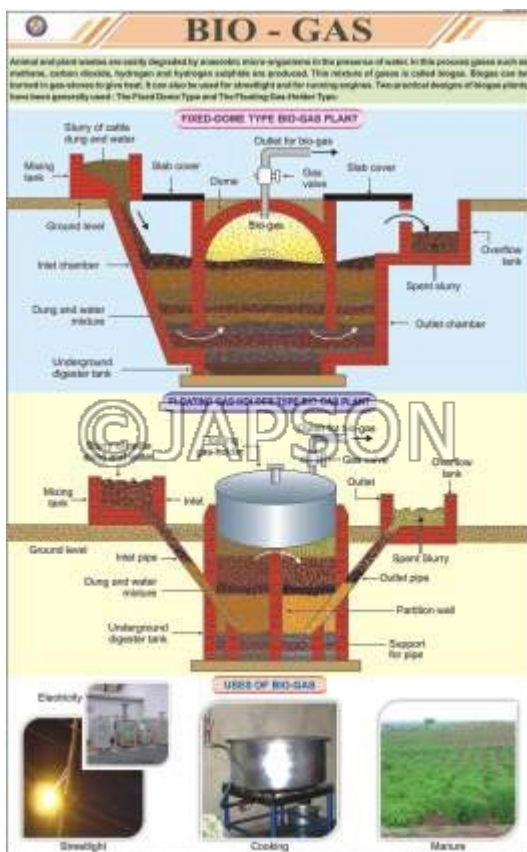
K. Charts, Medicinal Plants-1

L. Charts, Energy Needs



M.Charts, Bio - Gas

N. Charts, Animal Husbandry



O. Charts, Fossil Fuels

P. Charts, Nuclear Energy

Fossil Fuels

The term 'fossil' refers to parts of dead plants and animals that have been preserved in nature for thousands of years. These fossils which are used to obtain energy by any means are called fossil fuels. For eg., coal, petroleum, etc.

TYPES OF FUELS

Solid Fuels

Wood, coal and coke are important solid fuels. Coal is a result of carbonization of wood and other vegetation buried for a long time under the earth's surface. Coke is a solid fuel. Coke is obtained by heating coal in the absence of air.



Liquid Fuels

Petroleum is the most important liquid fuel. It is also a source of benzene, toluene and diesel. Benzene and alcohol are other important liquid fuels. Automobiles use petrol as liquid fuel.



Gaseous Fuels

Natural gas, the gas that is formed naturally along with petroleum deposits, is the most common type of gaseous fuel. Water gas and coal gas are other examples of gaseous fuels. CNG is used in cooking gas cylinders.



Characteristics of a Good Fuel

- A good fuel should not have any waste products on burning.
- It should have a high calorific value.
- It should produce very few pollutants.
- It should be easy to store, transport and handle.
- It should have a convenient ignition temperature.
- It should have a low ignition temperature.

Calorific Value

Calorific value is the amount of heat energy released when a unit mass of a fuel is burnt completely under ideal conditions. High calorific value implies that the fuel releases more energy per unit of mass burnt. Gaseous fuels have the highest calorific value and solid fuels generally have the lowest calorific value.

Fuel	Calorific Value (kJ/kg)
Coal	33
Wood	20
Coke	34
Hydrogen	142
Alcohol	30
Gasoline	44
Coal gas	17
Water gas	14
Coal	33
Wood	20
Coke	34
Hydrogen	142
Alcohol	30
Gasoline	44
Coal gas	17
Water gas	14

Uses of Petroleum Products

Lubricating oils: This is derived from petroleum products. This is used to lubricate machinery.

Asphalt: This is used to make roads, runways, etc.

Coal gas: This is a mixture of hydrogen, methane, carbon monoxide and other gases. It is used as a fuel for domestic cooking and lighting.

Coal tar: It is a mixture of several organic compounds. These compounds yield many important organic compounds, such as benzene, toluene, naphthalene, etc. It is used for making pesticides.


Chemical compounds: When distilled, it gives several products which are used to make nitrogenous fertilizers.

Other uses: It is the main raw material for the chemical industry. It is used to produce a variety of products like plastics, synthetic fibres, etc.

Nuclear Energy

Nuclear Energy Power Plant


In a nuclear reactor energy released is utilized to heat water and make steam. The steam is used to rotate turbines to generate electricity.



Sources of Nuclear Energy


Fission

Breaking up of a heavy nucleus like that of uranium into lighter elements and neutrons is called fission. Uncontrolled fission is a chain reaction.

$$^{235}_{92}\text{U} + ^1_0\text{n} \rightarrow ^{141}_{54}\text{Ba} + ^{92}_{36}\text{Kr} + 3^1_0\text{n} + \text{Energy}$$


Uncontrolled Chain Reaction


The highly destructive nuclear bomb is based on nuclear fission. Reaction of uranium-235 and plutonium-239 forms the atomic bomb.



Atomic Bomb

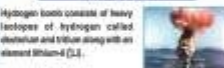
Fusion

The nucleus of hydrogen isotopes atoms join to form the nucleus of the helium atom. In this reaction tremendous amount of energy is released.

$$^2_1\text{H} + ^3_1\text{H} \rightarrow ^4_2\text{He} + ^1_0\text{n} + \text{Energy}$$


Hydrogen Bomb

Hydrogen bomb consists of heavy isotopes of hydrogen called deuterium and tritium along with an element like Li-6.



Uses of Nuclear Energy

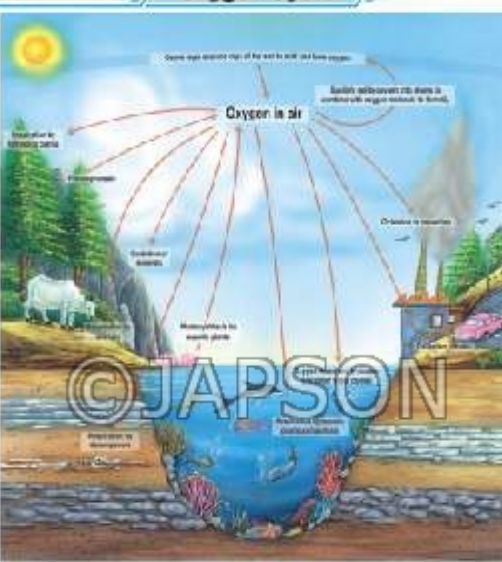
- Nuclear energy is used to produce electricity.
- Nuclear energy is used in radiotherapy.
- Nuclear energy is used to make nuclear weapons.

Effects of Nuclear Radiation









- Genetic Damages:** Exposure to radiation can affect generations.
- Health Hazards:** Radiation increases chances of cancer.
- Radioactive Contamination:** Radiation badly affects natural resources like water, soil, etc.

Q. Charts, Oxygen Cycle

Oxygen Cycle



Uses of Oxygen

R. Charts, Medicinal Plants-2

Medicinal Plants-2



(1) ALOE VERA
(A) ALOE VERA
(B) ALOE VERA
(C) ALOE VERA
(D) ALOE VERA



(2) BASIL
(A) BASIL
(B) BASIL
(C) BASIL
(D) BASIL



(3) CLOVE
(A) CLOVE
(B) CLOVE
(C) CLOVE
(D) CLOVE



(4) GINGER
(A) GINGER
(B) GINGER
(C) GINGER
(D) GINGER



(5) MINT
(A) MINT
(B) MINT
(C) MINT
(D) MINT



(6) PEPPERMINT
(A) PEPPERMINT
(B) PEPPERMINT
(C) PEPPERMINT
(D) PEPPERMINT



(7) SAGE
(A) SAGE
(B) SAGE
(C) SAGE
(D) SAGE



(8) THYME
(A) THYME
(B) THYME
(C) THYME
(D) THYME



(9) YARROW
(A) YARROW
(B) YARROW
(C) YARROW
(D) YARROW



(10) ZINC
(A) ZINC
(B) ZINC
(C) ZINC
(D) ZINC



(11) ALMOND
(A) ALMOND
(B) ALMOND
(C) ALMOND
(D) ALMOND



(12) CLOVE
(A) CLOVE
(B) CLOVE
(C) CLOVE
(D) CLOVE



(13) GINGER
(A) GINGER
(B) GINGER
(C) GINGER
(D) GINGER



(14) MINT
(A) MINT
(B) MINT
(C) MINT
(D) MINT



(15) PEPPERMINT
(A) PEPPERMINT
(B) PEPPERMINT
(C) PEPPERMINT
(D) PEPPERMINT



(16) SAGE
(A) SAGE
(B) SAGE
(C) SAGE
(D) SAGE



(17) THYME
(A) THYME
(B) THYME
(C) THYME
(D) THYME



(18) YARROW
(A) YARROW
(B) YARROW
(C) YARROW
(D) YARROW

S. Charts, The Cell Theory

The Cell Theory
Unicellular and Multicellular Organisms

As proposed by Schleiden (1804–1881) and Theodore Schwann (1810–1882) and modified by Rudolf Virchow (1855), 'The Cell Theory' may be summed up as:

1. All living things are composed of one or more cells.
2. All cells arise from pre-existing cells.
3. All cells are basically alike in chemical composition and metabolic activities.
4. The function of an organism as a whole is the outcome of the activities and interactions of the constituent cells.

A cell represents the cellular level. In unicellular organisms (single-celled) it performs all the functions in a living organism whereas in multicellular organisms (many-celled), the cell constitutes the basic structural and functional unit of a living organism, like the bricks in a building.

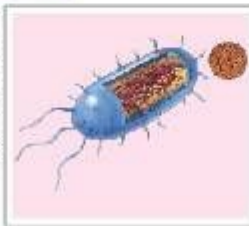
Types of Cells

In general, two types of cells are recognised. These are as follows:

1. Prokaryotic

These are simple in structure. Their nucleus is simple. Even the DNA is simple and circular. All membrane-bound organelles are absent. The nuclear membrane, microtubules and cytoplasmic streaming are also absent.

Example:- Bacteria cell



Bacteria Cell

2. Eukaryotic

These have a membrane bound nucleus enclosed by jelly-like fluid mass called cytoplasm, which is further enclosed by cell membrane and cell wall (only in plants). Membrane bound organelles are present. The DNA is complex and linear.

Example: All plant and animal cells.



Plant Cell

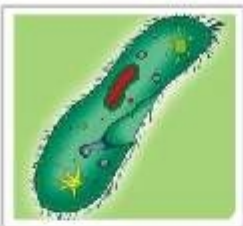
Unicellular Organisms

A unicellular organism is a unit structure of life, which is capable of leading an independent life. Each unicellular organism is capable of completing all the functions within the cell itself. Some of these unicellular organisms are given below:



Amphibies

Amoeba is a protozoa which locomotes by pseudopodia. It reproduces usually by binary fission.



Pour un meilleur

Paramoecium reproduces by binary or multiple fission and conjugation. Locomotion is by cilia.



References

Bacteria is present in soil, air and water and in living beings as parasite.



Plankton

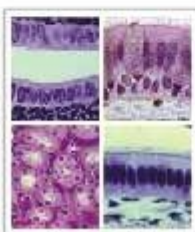
Plankton is present in the upper layers of sea water. It is a source of food for large marine animals.

Multicellular Organisms

Those organisms which consist of aggregation of many cells and some of which become specialised to perform essential functions of life are called multicellular organisms. Levels of organisation in a multicellular organism are given below:



Cell



TIGUNG



Organ



Organ System



Organism

FLUOROCIDE, INC., 30000 N. 11th St.,
Phoenix, AZ 85028-1100, (602) 998-1100
www.fluorocide.com

be made to design based on latest availability, process and design.