

## BASIC SCIENCE SCHEME J.S.3

S/N	TOPIC	CONTENT
1		Cell, genetics, heredity, Mendel's experiments on dominants and recessive characters, explanation of Mendel's law, members of the nuclear and extended family, finger prints, inheritance of albinism, inheritance of sickle cell, anemia, inheritance of blood groups, sex determination and importance of family traits.
2	Nervous system and sense organs	The Nervous system, The central nervous system, Brain, Fore brain, Olfactory lobes, Cerebrum, Mid brain, Cerebellum, Medulla oblongata, Spinal cord and spinal nerves, Peripheral nervous system, Somatic nervous system, Automatic nervous system, Reflex action (involuntary and automatic), Reflex arc, The importance of simple reflex to animals, Voluntary action, conditioned reflex as learned behavior, differences between reflex and voluntary action, unconditioned or inherited reflexes, sense organs, skin as a sense organ, protection of the eye, structure of the eye muscles, mechanism of seeing, care of the eye, advantages of having two eyes, binocular or stereo vision, the structure of the ear, mechanism of hearing and balance, care of the ear, organs of smell(nose), functions of the organs of smell, organ of taste(tongue), the defect of the organ of taste.
3	Reproductive health	Care and protection of the reproductive system, sexually transmitted infections/ STIs, types of STIs,.
4	Metabolism in the human body	Metabolism in the human body, diabetes, fatty acids and glycerol, obesity, how to know if a person is obese, effects of overweight.
5	The weather	Temperature, humidity, measurement of relative humidity, clouds, different types of clouds, rainfall(precipitation), visibility, dew, fog and mist, smog, lightning and thunder, storms, thunder storms, safe places to stay during thunder storm, hurricane, wind and haze.
6	Non-living things	Chemical symbols of element, formula and equation, chemical symbols, radicals, chemical equations.
7	Atoms, molecules, and atomic structures	Atoms, Dalton's atomic theory, modification of Dalton's atomic theory, molecules, atomic structure, atomic number.
8	Acids, bases and salt	Acids, base, methods of preparing bases, salt, types of salts and neutralization
9	Ozone layer	Formation of ozone, Importance of ozone, Importance of ozone layer of ozone layer, depletion of ozone layer chlorofluorocarbons (CFs), control of ozone layer depletion
10	Solid minerals	Types and sources of minerals, solid and liquid minerals, importance, consequences of over exploitation of mineral resources on the environment
11	Sound energy	Sound energy, echo and noise, hearing, and musical instruments
12	Magnetism	Magnetism, kind of magnet, laws of magnetism, types of magnets, methods of making magnets and uses of magnets
13	Light energy	Reflection of light, refraction, effects of refraction, effects of refraction on a plane surface, laws of refraction of light, formation of shadows and eclipses, eclipse, pin hole camera and colour filtration.
14	Electrical energy	Concept of electron flow, electric circuit, electrical measuring instrument.