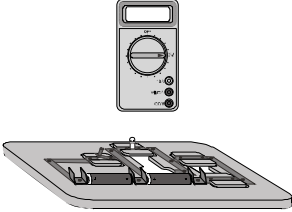
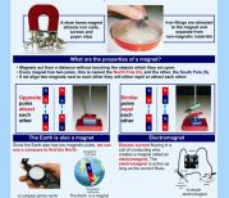




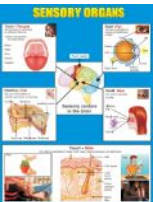
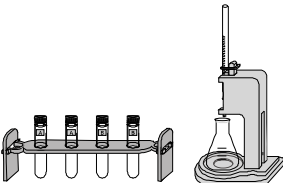






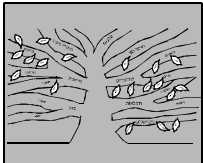
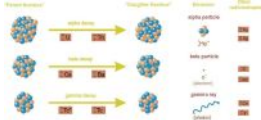
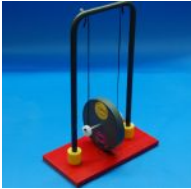
JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.		
	1	<i>Electric Energy</i>	5681-70	<p>Multiple use. This fascinating and easy to use advanced board enables experimenting with and studying electric circuits and basic principles of electricity. The student can change the order of the elements within seconds, learn the way bulbs are arranged, and sort different materials into conductors and non-conductors.</p>	
	2	<i>Magnets and Magnetism</i>	5669-70	<p>Multiple use. This module covers basic principles of magnetism and their practical applications. The experiments include: magnetic and non-magnetic materials, attraction and repulsion, magnet strength, magnetization, and recycling using magnets.</p>	
	3	<i>Sound Energy - Tuning Fork</i>	5682-70	<p>Multiple use. The kit includes a tuning fork with a resonance box as well as additional items required for the kit activities, aimed at producing sounds and understanding the source of sound.</p> <p>Teaching topics: Sound is produced by vibrating objects. Different vibrations produce different sounds. Sound propagates in the form of waves. Sound propagation depends on the medium. The terms: waves, amplitude, intensity, sound speed, resonance.</p>	
	4	<i>Light Energy</i>	5667-70	<p>Multiple use. Includes a poster, a lesson layout and prism.</p> <p>Teaching topics: Concept of reflection and refraction, explain how we see, explain the rainbow phenomenon.</p>	
	5	<i>Skill Acquisition</i>	5686-70	<p>Multiple use. Includes a poster and a lesson layout.</p> <p>Teaching topics: The terms "skill" and "profession" are defined. Types of skills and professions are presented with emphasis on modern technology. The importance of studying and acquiring skills and knowledge are discussed.</p>	

JSS Catalog - 60 kits - 2009






	Serial No.	KIT NAME	CAT No.		
	6	<i>Nutrition and Food Substances</i>	5663-70	<p>Multiple Use.. Includes a lesson plan with activities focusing on food substances, their roles and classification. Includes a poster of the food pyramid and what balanced diet means.</p> <p>Teaching topics: Family health, human nutrition.</p>	
	7	<i>Human Sensory Organs</i>	5676-70	<p>Multiple Use. Includes a poster of the five sensory organs and their corresponding sensory centers in the brain. Supplied with lesson plan and related activities .</p> <p>Teaching topics: Sense organs, the brain and the nervous system.</p>	
	8	<i>Acids and Bases and Titration</i>	5679-70	<p>Multiple use. The kit includes the required materials and equipment for exploring Acids and Bases by means of a series of experiments using acetic acid, sodium carbonate and indicators.</p> <p>Teaching topics: Students learn to identify acids and bases and methods how to neutralize them</p>	
	9	<i>Non Living Things (Elements, Compounds and Mixture)</i>	1031-66	<p>Multiple use. The kit includes a detailed periodic table poster and an accompanying lesson plan.</p> <p>Teaching topics: Defining elements, compounds and mixtures. The historical development of the periodic table. The symbols, properties and uses of common elements. Creating compounds by the combination of elements. Formulae of some common elements.</p>	
	10	<i>Resources from Living Things</i>	1031-70	<p>Multiple use. The kit includes a poster and a relevant lesson plan.</p> <p>Teaching topics: The nature of resources from living thing. Identifying the origins of these resources. Sorting the resources by their origin.</p>	

JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.		
	11	<i>Resources from Non Living Things</i>	5665-70	<p>Multiple use. The kit includes a poster, the materials required for rock classification activities and a relevant lesson plan.</p> <p>Teaching topics: Rocks and their sources. Solid minerals and their deposits in Nigeria. The importance and uses of rocks and solid minerals.</p>	
	12	<i>Information and Communication Technology</i>	5675-70	<p>Multiple use. The kit includes the required materials for exploring the technology of step by step preparation of a pencil is explored.</p> <p>Teaching topics: ICT gadgets are studied using a poster and the accompanying lesson plan.</p>	
	13	<i>Crude Oil and Petrochemicals</i>	5665-71	<p>Multiple use. The kit includes a crude oil distillation poster and a relevant lesson plan.</p> <p>Teaching topics: Crude oil, petrochemicals, crude oil refining, uses of crude oil and petrochemicals, the importance of crude oil in Nigeria.</p>	
	14	<i>Radioactivity</i>	5681-71	<p>Multiple use. Includes a poster and a lesson layout.</p> <p>Teaching topics: The poster and lesson plan give some historical background, explain radioactive decay and specifies its common types. They deal with its risks and describe some of its applications.</p>	
	15	<i>Potential Energy - Maxwell</i>	1158-00	<p>Multiple use. A disc rotates as it descends, converting potential energy into rotational energy rather than translational kinetic energy. It then rises, reversing the process.</p> <p>Teaching topics: Conservation of energy, Potential energy, Rotational energy.</p>	



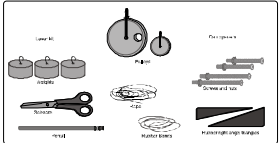
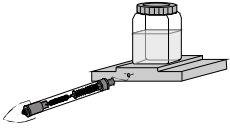

It takes a lot of sophistication to create simplicity...

JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.	
	16	<i>Potential Energy</i>	1133-00	<p>Multiple use. The kit consists of a transparent tube in which different weights fall freely. The difference in the potential energy of each weight can be estimated from the depth of the crater made in modeling clay.</p> <p>Teaching topics: Conservation of energy, Conversion of potential energy into kinetic energy.</p>
	17	<i>Solar Energy</i>	1134-00	<p>Multiple use. Solar energy is easily converted into electricity. It is then used to activate an electric motor with a propeller.</p> <p>Teaching topics: Direct conversion of light into electricity, Solar energy.</p>
	18	<i>Concave Mirror</i>	4333-04	<p>Multiple use: The sun's rays heat water when focused by a concave mirror on a test tube with water. The rise in temperature is measured using a thermometer.</p> <p>Teaching topics: Solar energy, Clean fuel, Pollution, Energy conversion, renewable energy, concave mirror.</p>
	19	<i>Chemical Energy</i>	1136-00	<p>Multiple use. Metal electrodes, when dipped into weak acid, produce electricity which drives an electric fan.</p> <p>Teaching topics: Electrochemistry, Oxidation-Reduction processes, Cell potential, Conversion of chemical energy into electrical energy.</p>
	20	<i>Electric Energy: Generator</i>	1132-00	<p>Multiple use. Turning a handle causes a magnet to rotate inside a metal coil, producing an electric current which lights up a bulb. Rotating the handle at a greater speed increases the brightness of the light. By means of an external battery, the generator can be transformed into an electric motor.</p> <p>Teaching topics: Energy transformations, the Principle of the electric generator and the electric motor.</p>



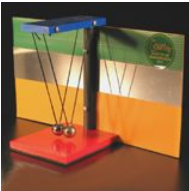


It takes a lot of sophistication to create simplicity...

JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.	
	21	<i>Hydroelectric Energy</i>	1134-99	<p>Multiple use. The pollution-free production of electricity from the power of "falling" water is clearly demonstrated by this safe and simple, but sophisticated, model. A stream of water hits and turns a water-wheel, causing a magnet to revolve. This dynamo produces an electric current which lights up a bulb.</p> <p>Teaching topics: The Pollution-free production of electricity, the Working of a hydro-electric power station, Energy transformations, the Principle of a dynamo.</p>
	22	<i>Steam Cannon</i>	1131-00	<p>Multiple use. When water inside a closed container is heated to boiling, the increase in pressure, as a result of the formation of steam, shoots the cork out of the tube. The supporting wagon moves in the opposite direction.</p> <p>Teaching topics: Pressure, Phase transition, Newton's Laws.</p>
	23	<i>Simple Machines</i>	5670-71	<p>Multiple use. The kit includes the equipment required to explore, learn and identify the various uses of simple machines. Simple machines make pulling or pushing work easier. There are six categories of simple machines: Lever, inclined plane, wheel and axle, screw and wedge pulley. The concept of mechanical advantage can be explained and studied.</p>
	24	<i>Friction – Expanded Version</i>	5668-70	<p>Multiple use. The kit includes a dynamometer and additional equipment that serves for exploring friction and measuring it.</p> <p>Teaching topics: Defining friction and exploring it. Pointing out where we encounter friction in our daily life. Discussing where it should be avoided and where it is very important for us. Measuring friction. Differentiating between static and dynamic friction.</p>
	25	<i>Electrostatics – Expanded Version</i>	5668-71	<p>Multiple use. The kit includes an electroscope as well as additional items required for performing activities, aimed at exploring electrostatics phenomena.</p> <p>Teaching topics: Experimenting with electrostatic forces and understanding their origin. Exploring charges, electric polarization and their effects. Recognizing electrostatic phenomena in our everyday life.</p>






It takes a lot of sophistication to create simplicity...

JSS Catalog - 60 kits - 2009






	Serial No.	KIT NAME	CAT No.		
	26	<i>Simple Machines: Pulleys</i>	5671-70		<p>Multiple use. The kit includes a set of pulleys, a poster and a lesson plan.</p> <p>Teaching topics: simple machines, pulleys. The accompanying lesson plan gives the relevant background and offers activities aimed at explaining the structure and function of pulleys' systems and exploring their uses and advantages.</p>
	27	<i>Efficiency of Simple Machines</i>	5670-70		<p>Multiple use. The kit includes a poster and a lesson plan.</p> <p>Teaching topics: Defining efficiency, discussing the fact that no machine is hundred percent efficient, factors that increase the efficiency of a machine, the advantages and disadvantages of simple machines.</p>
	28	<i>Kinetic Energy: Two Ball Pendulum</i>	1155-70		<p>Multiple use. The kit includes a two-ball pendulum. The apparatus is equipped with a mirror which makes it easy to follow the track of the steel balls.</p> <p>Teaching topics: Potential energy, Kinetic energy. The interchange of potential energy and kinetic energy, the conservation of energy and elastic collisions can be qualitatively followed.</p>
	29	<i>Heat Conductivity</i>	3003-08		<p>Multiple use. Includes stand, heating candle, several metal rods (copper, aluminum, stainless steel, brass), plastic rod markers, modeling clay and matches.</p> <p>Teaching topics: Heat conductance in solids, Insulators and heat conducting solids. Students can easily follow which of the metals is a better conductor.</p>
	30	<i>Heat and Temperature</i>	5680-70		<p>Multiple use. The kit includes the required equipment to perform activities to explore heat and temperature and what is the difference between them.</p> <p>Teaching topics: The student will learn about sources of heat, how to measure temperature accurately with the help of a thermometer in different scales. In addition, students will learn about heat conduction and what materials are heat conductors and what are heat insulators.</p>

It takes a lot of sophistication to create simplicity...






JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.		
	31	<i>Microscope operated on Batteries</i>	5683-70	<p>Multiple use. The kit includes a full scale monocular light microscope with three objectives (x4, x10, x40), 10 prepared slide and microscope slides .</p> <p>Teaching Topics: The cell structure. The use of the microscope. Preparation of wet mount and stained specimens. Comparison between animal and plant cells and tissues, protozoa and unicellular organisms.</p>	
	32	<i>Prepared microscope slides in a box</i>	5683-71	<p>Multiple use. 10 prepared slide and microscope slides .</p> <p>Teaching Topics: The prepared slide can supplement the teaching of various topics in biology.</p>	
	33	<i>Environmental Hazards: Erosion, Water Pollution and Waste Disposal</i>	5660-70	<p>Multiple use. This kit relates to the most crucial environmental waste disposal and global warming problems, namely, contaminated water. In this kit, children learn and practise purification of contaminated water by filtration and adsorption (using sand and charcoal), methods of waste separation.</p>	
	34	<i>Resistance of Liquids to Flow</i>	1816-08	<p>Multiple use. Two cylinders are filled with liquids of different viscosities. When the pistons are pulled, one can feel the difference in resistance, in accordance with their viscosities.</p> <p>Teaching topics: Viscosity, Flow rates of liquids of different viscosities.</p>	
	35	<i>The Earth and Space</i>	5672-70	<p>Multiple use. Includes a globe, a poster and a lesson plan.</p> <p>Teaching topics: Learn about the orbits of the Sun and planets, the moon phases and understand the difference between solar and lunar eclipses.</p>	






JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.		
	36	<i>Human Body – Brain and Nervous System</i>	5663-72		<p>Multiple Use. Includes a poster of the brain structure and nervous system. Supply with lesson plan with activities that demonstrate brain and spinal cord functions and reflexes.</p> <p>Teaching topics: Sense organs, the brain and the nervous system.</p>
	37	<i>Human Body – The Skeleton and Movement</i>	5663-73		<p>Multiple Use. Includes two posters: "The human skeleton" - major bones of the human body and "Skeleton and movement" – joint types, modes of movement and muscles. Supplied with a detailed lesson plan and activities.</p> <p>Teaching topics: Human body: Skeletal system and movement.</p>
	38	<i>Human Body – Digestion and Metabolism</i>	5663-74		<p>Multiple Use. Includes a human digestive system poster. Supplied with a lesson plan and activities that demonstrate digestion process, nutrient absorption and use of each nutrient.</p> <p>Teaching topics: Human body: digestive system, metabolism in the human body.</p>
	39	<i>Human Body – Circulatory System</i>	5663-75		<p>Multiple Use. Includes a poster of the human circulatory system. Supplied with a stethoscope, a lesson plan and activities.</p> <p>Teaching topics: Human body: circulatory system and the heart.</p>
	40	<i>Human Body – Respiratory System</i>	5663-76		<p>Multiple Use. Includes a poster of the human respiratory system. Supplied with a model demonstrating the breathing mechanism, a lesson plan and activities.</p> <p>Teaching topics: Human body: Human respiratory system.</p>

JSS Catalog - 60 kits - 2009


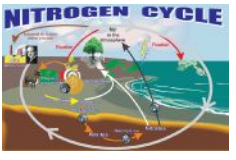



	Serial No.	KIT NAME	CAT No.		
	41	<i>Human Body – Reproduction System, Pregnancy and Birth</i>	5663-77	<p>Multiple Use. Includes posters of the reproductive system organs, menstrual cycle and pregnancy from zygote formation until birth. Supplied with a lesson plan describing function of the reproductive organs, puberty and secondary sexual characteristics, pregnancy and birth.</p> <p>Teaching topics: Human body: Human reproductive system, Development and growth</p>	
	42	<i>Human Body – Regulation</i>	5663-78	<p>Multiple Use. Includes a poster of major human body organs. Supplied with a lesson plan. Explains the coordination of various bodily systems and homeostasis by the hormonal glands, the liver. Regulation of mineral and water balance and waste removal from the body by the excretory system are discussed.</p> <p>Teaching topics: Regulation of human body, Human excretory system, homeostasis, water balance, glucose metabolism</p>	
	43	<i>Exploring Properties of Water</i>	5674-70	<p>Multiple Use. Children learn about the water cycle, evaporation, condensation, precipitation, water reservoirs, etc. Children perform several interesting experiments researching some of the most important properties of water, such as surface tension and capillarity action, which is the way plants and trees transport water from roots to leaves.</p>	
	44	<i>Genetics</i>	3375-70	<p>Multiple Use. Includes a lesson plan and activities to demonstrate Mendel's laws and assortment of dominant and recessive traits.</p> <p>Teaching topics: Genetics, hereditary, family traits.</p>	
	45	<i>Air and Atmospheric Pressure</i>	5664-70	<p>Multiple Use. Using specially designed equipment, this module illustrates atmospheric pressure and partial vacuum through observation and discovery. The experiments include: air pressure, air acting in all directions air compressibility, and the strength of atmospheric pressure.</p>	

JSS Catalog - 60 kits - 2009






	Serial No.	KIT NAME	CAT No.		
	46	Measurements	5661-70	<p>Multiple use. The kit includes a poster and the equipment required to learn how we measure time, length, volume, temperature and weight.</p> <p>Teaching topics: The need of performing measurements is conveyed, and its importance in science and technology is addressed.</p>	
	47	Growing Better crops	5678-70	<p>Multiple Use. Includes a poster, a lesson plan and activities. Describes cultivating methods including the use of soil, fertilizers, pesticides. Describes factors affecting plant growth and production of crops.</p> <p>Teaching topics: Agriculture, nutrition, food types, soil.</p>	
	48	Plant Life Cycle	5678-71	<p>Multiple Use. Includes a poster and a lesson plan. Describes the reproductive organs in flowers and the factors affecting seed germination, as well as plant growth, pollination, fertilization, fruit formation and seed dispersal.</p> <p>Teaching topics: plant life cycle, plant reproduction, changes in living things.</p>	
	49	Drug Abuse	5666-00	<p>Multiple Use. Includes a poster, a lesson plan and equipment required for activities to experience temporal dizziness, optical illusions and impaired vision are provided.</p> <p>Teaching topics: drug abuse, among the topics that are discussed are legal and illegal drugs, effects of common drugs, and addiction.</p>	
	50	Preparation of Soil	5673-70	<p>Disposable Kit: Includes the chemicals and tools in order to carry out analysis of the composition of soil using real soil samples.</p> <p>Teaching topics: methods of chemical analysis, determine major chemical components in soil, compare the results of different types of soils.</p>	

It takes a lot of sophistication to create simplicity...

JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.		
	51	<i>Carbon Cycle</i>	3016-66	<p>Multiple use. Includes lesson layout, a gas generator and chemicals required for activities aimed to demonstrate the various processes responsible for carbon transfer between hydrosphere, atmosphere, lithosphere and biosphere.</p> <p>Teaching topics: Functioning ecosystem - element cycling, carbon cycle, respiration, photosynthesis, combustion, sedimentation, decomposition.</p>	
	52	<i>Nitrogen Cycle</i>	1145-66	<p>Multiple use. Includes a poster describing the natural nitrogen cycling and effects of human intervention on this cycle.</p> <p>Teaching topics: Functioning ecosystem - element cycling, growing better crops, water pollution.</p>	
	53	<i>Diseases: vectors, prevention and immunization</i>	5663-79	<p>Multiple Use. Includes a poster and a lesson plan. Disease types, modes of disease transfer and vectors are described. Ways to prevent disease including sanitation, immunization, education and choice making, are discussed</p> <p>Teaching topics: Family health, disease vectors, disease prevention, immunization</p>	
	54	<i>Reproductive Health – AIDS and STIs</i>	5663-80	<p>Multiple Use. Includes a poster and a lesson plan. The HIV virus, its transmission and AIDS symptoms are described. Prevention and cure of sexually transmitted diseases are discussed.</p> <p>Teaching topics: Reproductive health, prevention of STIs and HIV / AIDS, drug abuse.</p>	
	55	<i>Family Health and Cleaning</i>	5663-81	<p>Multiple use. The kit includes a poster and a relevant lesson plan.</p> <p>Teaching topics: Personal hygiene. Cleaning our bodies, homes and environments. The consequences of poor hygiene.</p>	

JSS Catalog - 60 kits - 2009

	Serial No.	KIT NAME	CAT No.		
	56	<i>Preparation of Soap</i>	3377-00	<p>Disposable Kit: Includes all the chemicals and tools in order to safely produce real soap.</p> <p>Teaching topics: Technology, fats and oils. Triglycerides and specification process and Emulsions. Human health and hygiene</p>	
	57	<i>Dental Care</i>	5663-82	<p>Multiple use. The kit includes a human teeth model, a big tooth brush, a poster and a relevant lesson plan.</p> <p>Teaching topics: The structure of a tooth. The human teeth and their location in the mouth. Milk and permanent teeth. Keeping our teeth clean. The importance of mouth hygiene.</p>	
	58	<i>Technology of Toothpaste Preparation</i>	6500-40	<p>Disposable Kit: Includes all materials and ingredients for the production of real-tooth paste. All the ingredients are food grade.</p> <p>Teaching topics. Human health, teeth and gum disease. Technology of production, advertisement and marketing.</p>	
	59	<i>Q & A Electronic Board</i>	5686-71	<p>Multiple use. Including electric boards and sets of Q&A charts.</p> <p>Teaching topics. The electronic board is very helpful and user-friendly. After reviewing the subject, pupils should try and answer questions related to the subject they have just learned.</p>	
	60	<i>Q & A Charts</i>	5686-72	<p>Multiple use. Q & A charts are included for each subject covered by the lessons. After reviewing the subject, pupils should try and answer questions related to the subject they have just learned.</p>	