

**OPENDOOR SYLLABUS FOR CYCLE 2**

CLASS	SUBJECT	TOPICS	SUBTOPICS
III	Science		<p>Parts of plant: types of root, stem, leaves and venation, flower, diagrams, germination, Function of plant parts, Factors needed for germination</p> <p>Food habits of animals based on food, food chain, predators and prey, producers, types of consumers, decomposers</p>
IV	Science		<p>A. Chapter- Green plants</p> <ol style="list-style-type: none"> <li>1. Leaf and its structure</li> <li>2. Photosynthesis, its source and their function</li> <li>3. Stomata, diagram, functions</li> <li>4. Transpiration and its diagram</li> <li>5. Usefulness of different things from plants - vegetables, fruits, gum, rubber, oxygen, scent, cereals, compost, medicine.</li> <li>6. Interdependence of plants and animals.</li> </ol> <p>B. Chapter- Food our basic need</p> <ol style="list-style-type: none"> <li>1. Carbohydrate, proteins, fat, vitamins, minerals, roughage and water.</li> <li>2. Balanced diet.</li> </ol> <p>C. Chapter- Digestion of food</p> <ol style="list-style-type: none"> <li>1. Teeth-its structure, types and functions</li> <li>2. Care of teeth</li> </ol>
V	Science		<p>Skeletal and nervous system</p> <p>Types and no. Of bone present in human backbone, bones present in human hand, bones present in human leg, smallest bone, longest bone, ligament, tendon, structure of human eye and their functions, location of taste buds present in human tongue, olfactory nerve, optic nerve, auditory nerve three main parts of human brain- cerebrum, cerebellum, medulla and each part controlling various activities, Joints, Reflex action</p> <p>Force- definition, effects, types of forces- muscular, magnetic, electrostatic, gravitational, frictional, mechanical ( only definition and example), work done, formula, small and simple numerical based on work done formula.</p>
VI	Science	Physics	<p>Motion –</p> <ol style="list-style-type: none"> <li>1. Different types of motion and their examples</li> <li>2. Concept of distance of displacement in case of square, rectangle, circular and triangular and straight path.</li> <li>3. Concept of speed and velocity along with numerical.</li> <li>4, Only the concept of Acceleration and Retardation.</li> <li>5. Units and dimension of distance, displacement, speed, velocity and acceleration</li> </ol>

			<p>Magnetism-</p> <ol style="list-style-type: none"> <li>1) Identification of different types of magnets and Magnetic materials.</li> <li>2) Concept of Poles of the magnet</li> <li>3) Different properties of magnet</li> <li>4) How to make a temporary magnet</li> <li>5) How to Handle magnets</li> <li>6) Concept of magnetic field and field lines for a bar magnet</li> </ol>
		Chemistry	<p>SYMBOLS- Definition and assigning rules with example. Properties of molecules, Elementary and compound molecules. Ions and valency.</p>
VII	Science	Physics	<p>Heat:</p> <ol style="list-style-type: none"> <li>1)What is heat</li> <li>2)What is temp</li> <li>3) Three types of heat transfer- conduction, convection and radiation (Only concept through pictures and experiments on conduction)</li> <li>4) Good and bad conductors of heat and related questions on it like- Why the base of a frying pan is made black?</li> <li>5) Heat flows from a hotter to a colder body</li> </ol>
		Chemistry	Fiber to fabric
		Biology	<p>Respiration Respiration definition, aerobic and anaerobic respiration with equation, external, internal and cellular respiration, process of inhalation and exhalation in human, respiratory organs in human, respiration in plants, respiration in animals (earthworm, whales, cockroach)</p>
VIII	Science	Physics	<p>Friction – Definition, positive and negative effect</p> <p>Force – distance, displacement, speed velocity, acceleration, time, mass, force</p> <p>Newton’s Law, law of conservation of linear momentum (basic idea and some application)</p>
		Chemistry	<p>Vaporization Evaporation and its factors States of matter</p>
		Biology	<p>Ch- conservation of biodiversity Threats to biodiversity, effects of biodiversity destruction, extinct, endangered, critically endangered species, wild life protection in zoos and sanctuaries, biodiversity hotspots, red data book, Def of biodiversity, national park, sanctuaries difference, importance in conservation, in situ ex situ conservation</p>

