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| **Subject** | **Theme** | **Topic** | **Sub-Topics** |
| Physics | Kinematics | Motion | a. Motion of an Object; Rate of Motion; Velocityb. Graphical Representation of Motion - Distance and Velocity time graphsc. Equations of Motiond. Uniform Circular Motion |
| Motion and Measurements of Distance | a. Distance - Story of transport, measurement, length of a curved lineb. Types of Motion |
| Motion and Time | a. Speedb. Measurement of Timec. Graphs |
| Force | Force and Laws of Motion | a. Balanced and Unbalanced forcesb. Newton's Laws of Motion - Inertia and Mass; Conservation of Momentum |
| Force and Pressure | a. Push and Pullb. Force due to an Interactionc. Force can change the state of motion or shape of an objectd. Contact Forces - muscular, frictione. Non-contact Forces - Magnetic, Electrostatic, Gravitationalf. Pressure exerted by liquids and gasesg. Atmospheric Pressure |
| Friction | a. Factors affecting frictionb. Necessity of Frictionc. Increasing and reducing friction, e.g. wheelsd. Fluid friction |
| Gravitation | a. Gravitationb. Gravitational Force of Earth - Free Fall |
| Chemistry | Acids, Bases and Salts | Acids, Bases and Salts | a. Chemical Properties of Acids and Bases - reaction with metals, metallic carbonates, each other, metal and non-metal oxides etcb. Common properties of acids and basesc. Strength of Acids and Basesd. Salts - Family, pHe. Chemicals from Common Salt - sodium hydroxide, bleaching powder, baking soda, washing sodaf. Salt crystals - are they really dry? |
| Matter | Is Matter Around Us Pure | a. What is a mixture?; Type of mixturesb. Solutionsc. Components of a mixture and separationd. pH indicators, elements, compounds |
| Matter in Our Surroundings | a. Physical Nature of Matter; Particles of Matterb. States of Matter; Change of States of Matter, e.g. Evaporation |
| Sorting Materials into Groups | a. Properties of Materials - appearance, hardness, solubility, density, transparency etc |
| Structure of The Atom | a. Atomic Structure - Charged Particles in Matterb. Thomson's, Rutherford's and Bohr's modelc. Neutrons, Electrons, Protonsd. Electronic Shells and Valencye. Atomic number and massf. Isotopes and Isobars |
| Biology | Animal Joints and Movement | Body Movement and Gait of Animals | a. Human Body and its Movements - Types of jointsb. Gait of Animals - Earthworm, snail, cockroach, birds, fish, snake, etc. |
| Animal Respiration and Transportation | Respiration in Organisms | a. Need of respirationb. Breathing - Inhale/exhale, in humans, other animalsc. Breathing under waterd. Breathing in plants |
| Transportation in Animals and Plants | a. Circulation System - Blood, vessels, heartb. Excretion in Animalsc. Transportation in Plants - Transport of water and minerals, transpiration |