**AIR FORCE SCHOOL, BAMRAULI**
**ANNUAL SPLIT-UP OF SYLLABUS**
**ACADEMIC SESSION (2026-27)**

**CLASS-IX** **SUB-SCIENCE**

**BOOK- NCERT EXPLORATION**

| MONTH NAME | CHAPTER NO. & NAME | TOPIC/SUB-TOPICS | NO. OF PERIODS | ACTIVITY |
|---|---|---|---|---|
| **April** | CH 5 : EXPLORING MIXTURES & THEIR SEPARATION | Solutions, suspensions, colloids and their propertie Separation techniques based on the physical properties of components | 12 | Preparation of true, suspension and colloidal solution and distinguishing them on the basis of 1.Transparency 2.filteration 3.Stability |
| | CH 2 : CELL- THE BUILDING BLOCK OF LIFE | Prokaryotic and eukaryotic cells structure and function of key organelles Cellular division Recent advancement in cell biology | 12 | Microscope observation of onion peel & cheek cells |
| **May** | CH 4 : DESCRIBING MOTION AROUND US | Distance and displacement, velocity; uniform and non-uniform motion along a straight line Acceleration, Position-time and velocity-time graphs, uniform circular motion | 9 | Activity: toy car motion on track; measure speed |
| **June** | | | 11 | |
| **July** | CH 8 : JOURNEY INSIDE THE ATOM | Atomic Models Distributions of electrons in elements Symbols Valency, Atomic number,Mass number | 13 | Chart-making: timeline of atomic models (Dalton → Bohr) |
| | CH 3 : TISSUE IN ACTION | Tissues, Organs, Organ System, Organism Structure and functions of Animals and plant tissues Care of musculoskeletal system | 13 | To identify parenchyma and Collenchyma, sclerenchyma tissues in plants striated, smooth and cardiac muscle fibers and nerve cells in animals from prepared slides |
| **Aug** | | | 10 | |
| | CH 6: HOW FORCES AFFECT MOTION | Balanced and unbalanced forces Friction Newton's laws of motion | 13 | Balloon rocket experiment to show action-reaction |

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| **Sept** | CH 9 : ATOMIC FOUNDATIONS OF MATTER | Law of conservation of mass & proportion constant Dalton's Atomic theory Covalent & Ionic compounds and their properties Writing formulae Molecular mass | 16 | Verification of the law of conservation of mass in a chemical reaction. Role-play: students act as atoms forming molecules |
| **Oct** | CH 12 : PATTERNS IN LIFE-DIVERSITY & CLASSIFICATION | Importance of classification, Five kingdoms and their key features with examples, Major division of animals and plants, Binomial nomenclature, Acellular entities: viruses | 16 | Ask groups to sort organisms into categories (plants, animals, fungi, microorganisms). Then refine into subcategories (vertebrates/invertebrates, flowering/non- |
| **Nov** | CH 7 : WORK, ENERGY & SIMPLE MACHINES | Work-Energy theorem, kinetic and potential energy, and conversion between potential energy and kinetic energy, Simple machines and their mechanical advantage (pulley, inclined plane, lever) | 16 | Use a ruler as a lever with a fulcrum to lift a load and observe how effort changes with fulcrum position, Pendulum experiment to show energy transformation |
| **Dec** | CH 13 : EARTH AS A SYSTEM-ENERGY, MATTER & LIFE | Nature of solar energy: solar radiation, electromagnetic spectrum, Differential warming of the Earth causes winds, Biogeochemical cycles, Human impact on Earth's system | 14 | Model the Earth system by using bowls of water, soil, plants, and a lamp to show energy flow, matter cycles, and life interactions |
| **Jan** | CH 10 : SOUND WAVES : CHARACTERISTICS & APPLICATIONS | Production & Propagation of sound, Characteristics of sound, Propagation of sound in different media. Reflection of sound wave | 13 | Determination of speed of pulse propagated through a stretched string, Tuning fork in water |
| **Feb** | CH 11 : REPRODUCTION : HOW LIFE CONTINUES | Reproduction—sexual and asexual, Types of asexual reproduction, Sexual reproduction in flowering plants & in humans, Reproductive health & hygiene, Introduction to birth control methods | 13 | Use flower buds or sprouted seeds to observe stages of reproduction and explain how life continues through new generation. |