**AIR FORCE SCHOOL BAMRAULI**

**ANNUAL SPLIT-UP OF SYLLABUS**

**Academic session: 2022-2023**

**CLASS : VIII**

**SUBJECT : SCIENCE**

**BOOK : SCIENCE FOR CLASS VIII**

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| **MONTH NAME** | **CHAPTER NO: & CHAPTER NAME** | **TOPIC/ SUBTOPIC** | **ACTIVITY (AS PER NCERT)** |
| **APRIL** | Ch:1Crop production & Management Ch:3Synthetic fibres and plastics | Ch:1Agriculturalpractices, basic preparation of crop production, preparation of soil, sowing, adding manure and fertilisers, irrigation, harvesting, storage, food from animals.Ch:3 what are synthetic fibres?, types of synthetic fibres, characteristics of synthetic fibres. Plastics, plastic as material of choice, plastics and the environment**.** | Ch:1Activity: Separating healthy seeds from damaged ones Ch:3Activity- Strength of fibreActivity- Soaking capacity of different Fibres |
| **MAY-JUNE** | Ch: 11Force and pressure  | Ch:11Force -a push or a pull, forces due to an interaction, exploring forces, force can change the state of motion, the force can change the shape of an object, contact forces, non- contact forces, pressure, pressure exerted by liquids and gases, atmospheric pressure**.** | Ch:11Activity-Identifying the actions as push or pullActivity- Applying force on a objectActivity: Force Applied On a ballActivity: Applying force On the moving ballActivity: The effect of force on ObjectsActivity: Observing Attraction and repulsion between two magnets |
| **JULY** | Ch:2Microorganisms: Friend &FoeCh-4Materials: Metal and non-metals. | Ch:2Microorganisms, where do microorganisms live?, Microorganisms and us, harmful microorganisms, food preservation, nitrogen fixation, nitrogen cycle.Ch-4Physical properties of metals and non- metals, chemical properties of metal and non metals, uses of metal and nonmetals**.** | Ch:2 Activity: Maida With Yeast PowderActivity : Fermentation Activity: Plant waste converted to manure Ch:4 Activity : Malleability of materials Activity : Electrical conductivity of materials Activity : Testing the nature of RustActivity : Reaction of non-metals with oxygen Activity : Reaction of metals and non metals with acidsActivity : Reaction with bases Activity : Displacement reaction  |
| **AUGUST**  | Ch-12FrictionCh:7Conservation of plants and animals. | Ch-12Force of friction,Factors affecting friction, friction: a necessary evil, increasing and reducing friction, fluid friction.Ch-7Deforestation and its causes,Consequences of deforestation, conservation of forest and wildlife, biosphere reserve, flora and fauna, endemic species, wildlife sanctuary, national park, red data book, migration, recycling of paper, reforestation. | Ch:12 Activity: Factors affecting friction Ch:7 Activity: Locate On Map, (Protected Areas For Conservation |
| **SEPTEMBER**  | Ch:5Coal and petroleum Ch:13Sound. | Ch:5Inexhaustible and exhaustible, natural resources, coal and petroleum, natural gas, some natural resources are limited.Ch:13Sound is produced by a vibrating body, sound produced by humans, sound need a medium for propogation, we hear sound through our ears, amplitude, time period and frequency of a vibration, audible and inaudible sounds, noise and music, noisepollution**.** | Ch:5 Activity : make a list of natural and man made materials  Ch:13 Activity: Sound is produce by a vibrating body Activity: Plucking the Rubber band produce Sound Activity: Vibrating Dish Produces waves in Water Activity: Make a musical instrument Ektara  |
| **OCTOBER**  | Ch:8Cell -structure, and functionsCh:6Combustion and flame. | Ch:8Discovery of a cell, organisms, variation in cell shape and size cell structure and function. Parts of the cell comparison of plant and animal cell.Ch:6Combustion, how do we control fire? Types of combustion, flame and structure of flame, Fuel andfuel efficiency | Ch:8 Activity: Amoeba and paramecium under microscope Activity : Observing the basic component of the cell and Human Cheek Cells (permamnent slides)Ch:6 Activity: Combustible And Non-combustible substances Activity: Air is essential for BurningActivity: Structure of a flame  |
| **NOVEMBER**  | Ch:14Chemical effect of electric current.Ch:9Reproduction in animals  | Ch:14Do liquids conduct electricity? Chemical effects of electric currents. Electroplating and its uses, good conductors and bad conductors.Ch:9Modes of reproduction, sexual reproduction, male reproductive organs, female reproductive organs and fertilization. Development of embryo,viviparous and oviparous animals. Young to adults, asexual reproduction by budding and binary fission. | Ch:14Ch:14 Activity: Do liquids conduct electricityActivity: Testing Conduction of electricity in lemon juice Or VinegarActivity: good or poor conducting liquidsCh:9 Activity: permanent slides of budding in Hydra will be shown to students  |
| **DECEMBER**  | Ch:15Some natural phenomenaCh-10Reaching the age of adolescence | Ch:15Lightning, charging by rubber, types of charges and their interaction, transfer of charge, the story of lightning, lightning safety, earthquake.Ch:10Adolescence and puberty, changes at puberty, secondary sexual characters, role of hormones in initiating reproductivefunction, reproductive phase of life in humans, how is the sex of the determined, role of hormones in completing the life history of insects and frogs, reproductive health**.** | Ch:15 Activity: Charging by rubbing Activity: Charging by rubbing on different materials Activity: Types of charges and their Interaction Activity: Transfer of charge Ch:10 Activity: Prepare a list on benefits of regular exercise  |
| **JANUARY**  | Ch-16LightCh:18Pollution of air and water | Ch:16Laws of reflection, regular and diffused reflection, multiple reflections, multiple images, sunlight, white or coloured,human eye-structure and function, care of eyes, visually challenged persons can read and write – Braille system.Ch:18Air pollution, how does air get polluted? Case study: Taj Mahal, what can be done to reduce global warming? Ozone depletion. Water pollution, how does water get polluted? What can be done to reduce water pollution**.** | Ch:16 Activity: related to laws of reflection Activity : Incident ray and reflected ray and the normal lie on the same plane.Activity : Image formed on a plane mirror. Activity: Reflection of rays on regular and irregular surfaces. Activity: images formed on a plane at a right angle to each other. Activity: Making of kaleidoscope. Activity: Dispersion of light. Activity : Observation of friends pupilCh:18 Activity: Prepare a table showing pollutants Activity: collect samples of water from different water bodies.  |
| **FEBRUARY**  | Ch: 17Stars of the solar system**Revision**  | Ch:17The moon, the stars, constellations, the solar system, some other members of the solar system. | Activity: Find out from newpaper when venus is visible in the sky  |