**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:1  Crop production & Management  Ch:3  Synthetic fibres and plastics | Ch:1  Agriculturalpractices, 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:1  Activity: Separating healthy seeds from damaged ones  Ch:3  Activity- Strength of fibre  Activity- Soaking capacity of different Fibres |
| **MAY-JUNE** | Ch: 11  Force and pressure | Ch:11  Force -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:11  Activity-Identifying the actions as push or pull  Activity- Applying force on a object  Activity: Force Applied On a ball  Activity: Applying force On the moving ball  Activity: The effect of force on Objects  Activity: Observing Attraction and repulsion between two magnets |
| **JULY** | Ch:2  Microorganisms: Friend &Foe  Ch-4  Materials: Metal and non-metals. | Ch:2  Microorganisms, where do microorganisms live?, Microorganisms and us, harmful microorganisms, food preservation, nitrogen fixation, nitrogen cycle.  Ch-4  Physical properties of metals and non- metals, chemical properties of metal and non metals, uses of metal and nonmetals**.** | Ch:2  Activity: Maida With Yeast Powder  Activity : Fermentation  Activity: Plant waste converted to manure  Ch:4  Activity : Malleability of materials  Activity : Electrical conductivity of materials  Activity : Testing the nature of Rust  Activity : Reaction of non-metals with oxygen  Activity : Reaction of metals and non metals with acids  Activity : Reaction with bases  Activity : Displacement reaction |
| **AUGUST** | Ch-12  Friction  Ch:7  Conservation of plants and animals. | Ch-12  Force of friction,  Factors affecting friction, friction: a necessary evil, increasing and reducing friction, fluid friction.  Ch-7  Deforestation 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:5  Coal and petroleum  Ch:13  Sound. | Ch:5  Inexhaustible and exhaustible, natural resources, coal and petroleum, natural gas, some natural resources are limited.  Ch:13  Sound 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:8  Cell -structure, and functions  Ch:6  Combustion and flame. | Ch:8  Discovery 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:6  Combustion, 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 Burning  Activity: Structure of a flame |
| **NOVEMBER** | Ch:14  Chemical effect of electric current.  Ch:9  Reproduction in animals | Ch:14  Do liquids conduct electricity? Chemical effects of electric currents. Electroplating and its uses, good conductors and bad conductors.  Ch:9  Modes 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:14  Ch:14  Activity: Do liquids conduct electricity  Activity: Testing Conduction of electricity in lemon juice Or Vinegar  Activity: good or poor conducting liquids  Ch:9  Activity: permanent slides of budding in Hydra will be shown to students |
| **DECEMBER** | Ch:15  Some natural phenomena  Ch-10  Reaching the age of adolescence | Ch:15  Lightning, charging by rubber, types of charges and their interaction, transfer of charge, the story of lightning, lightning safety, earthquake.  Ch:10  Adolescence 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-16  Light  Ch:18  Pollution of air and water | Ch:16  Laws 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:18  Air 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 pupil  Ch:18  Activity: Prepare a table showing pollutants  Activity: collect samples of water from different water bodies. |
| **FEBRUARY** | Ch: 17  Stars of the solar system  **Revision** | Ch:17  The 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 |