

**WEEKLY DETAILED SYLLABUS**

**SESSION-2015-16**

**CLASS-VIII**

**SUBJECT : SCIENCE**

<b>DATE</b>	<b>CONTENT</b>
01.04.2015 to 04.04.2015	Lesson-3 : Synthetic fibers and plastics. Introduction, synthetic fibres, types of synthetic fibres; characteristics of synthetic fibres. Activity : Collection of samples of various synthetic fibres and study their properties.
06.04.2015 to 10.04.2015	Lesson-3 : Synthetic fibres and Plastics (contd..) Plastic, plastics as materials of choice, plastics and environment. Lesson-17 : Stars and the solar system Introduction, the moon, the stars, constellation.
13.04.2015 to 18.04.2015	Lesson-17 : Stars and the solar system (contd...) The solar system, the planets, some other members of the solar system. Activities : (1) Prepare a model of solar system / eclipse / various phase of moon / constellation (2) Sky observation (a) position of pole star (b) any one constellation (c) position and shapes /size of moon.
16.04.2015	<b>UNIT TEST</b>
20.04.2015 to 25.04.2015	Lesson-5 : Coal and Petroleum Introduction, inexhaustible and exhaustible natural resources, coal, petroleum. Activities : (1) Visit a nearest thermal power station, if feasible. (2) Comparing the density of various types of coal. (3) Existence of pores in wood, coal and putting them in water. (4) Celebration of earth day by poster making / slogan writing.

27.04.2015 to 02.05.2015	Lesson-5 : Coal and Petroleum (contd...) Natural gas, some natural resources are limited. Lesson-1 : Crop production and management Introduction, agricultural practices, basic practices of crop production. Activity : To study the conditions necessary for germination of seeds.
05.05.2015 to 08.05.2015	Lesson-1 : Crop production and management (contd...) Agricultural practices – preparation of soil; sowing, adding manure and fertilizers, irrigation, protection from weeds, harvesting, storage, food from animals. Activities : (1) Paste the picture of agricultural machines and write their uses in file. (2) To observe the effect of manure and fertilizer on the growth of plants.
11.05.2015 to 30.06.2015	<b>SUMMER VACATION</b> Visit to a village and observing and tabulating various processes involved in agricultural practices.
01.07.2015 to 04.07.2015	Lesson-2 : Micro organisms : Friends and Foes Introduction, microorganisms, where do microorganisms live? Micro organisms and us. Activities : (1) To study the permanent slides of micro organisms and categorize them into various groups. (2) To prepare temporary mounts of bread mould. (3) To study the root nodules in the roots of leguminous plants.
06.07.2015 to 10.07.2015	Lesson-2 : Micro organisms Friends and Foes (contd...) Harmful microorganism, stable 2.1 NCERT, 2.2 NCERT Food preservation, nitrogen fixation, nitrogen cycle. Activities : (1) Collect the labels from the packets of jam / jellies / pickles and write down the list of printed contents. (2) Making charts / slogan writing on pulse polio / TB. Yuva Session : 8.6 Himesh Ki Pasand

13.07.2015 to 18.07.2015	<p>Lesson-18 : Pollution of Air and Water</p> <p>Introduction, Air pollution, how does air get polluted?</p> <p>Case Study : Taj Mahal, Green House effect, what can be done to reduce global warming? / ozone depletion?</p> <p>Activities : (1) Visit to nearest pollution checking centre with parents and recording the process and facts related to pollution check.</p> <p>(2) To make a project / poster / slogan writing on green house effect / global warming / ozone depletion.</p>
20.07.2015 to 25.07.2015	<p>Lesson-18: Pollution of Air and Water (contd...)</p> <p>Water Pollution, how does water get polluted? Potable water, water purification, what can be done to reduce pollution.</p> <p>Activity : Preparing a list / collecting information about diseases caused by various types of pollution / pollutants.</p> <p>Yuva Session : 3.10 every drop is precious.</p>
23.07.2015	<b>UNIT TEST - II</b>
27.07.2015 to 01.08.2015	<p>Lesson-7 : Conservation of plants and animals</p> <p>Introduction, deforestation and its causes, consequences of deforestation, conservation of forests and wild life, biosphere reserve; floral and fauna; endemic species.</p> <p>Activity : Participation in Eco club activities (Tree plantation drive Van Mahotsava)</p> <p>Yuva session: 8.10 I love my class room garden.</p>
03.08.2015 to 07.08.2015	<p>Lesson-7 : Conservation of plants and animals (contd....)</p> <p>Wild life sanctuary, national park, red data book, migration, recycling of paper, reforestation.</p> <p>Activity : To make your own paper using wastes.</p>
10.08.2015 to 14.08.2015	<p>Lesson-14 : Chemical effects of electric current.</p> <p>Introduction, do liquid conduct electricity? Chemical effects of electric current, electroplating and its uses.</p> <p>Activities : (1) To test the conduction of electricity through various fruits and vegetables, wood piece, metal piece and display your result in tabular form. (As good/bad conductor)</p> <p>(2) To study the phenomenon of electroplating by simple circuit.</p>

17.08.2015 to 22.08.2015	<p>Lesson-11 : Force and Pressure</p> <p>Introduction, force a push or a pull, forces are due to an interaction, exploring forces, a force can be change the state / shape / direction/ speed of an object / moving object; contact forces.</p> <p>Activity : To study various types of forces and their impacts.</p>
24.08.2015 to 29.08.2015	<p>Lesson-11 : Force and Pressure (contd...)</p> <p>Not contact forces, pressure, pressure exerted by liquids and gases; atmospheric pressure.</p> <p>Activities : (1) To study the increase in pressure exerted by the liquid at the greater depths.</p> <p>(2) To observe the force of attraction and repulsion between the poles of bar magnets/charges.</p> <p>(3) To study the dependence of pressure on area.</p>
31.08.2015 to 04.09.2015	<p>Lesson-12 : Friction</p> <p>Introduction, force of friction, factors affecting friction, friction : a necessary evil, increasing and reducing friction, wheel reduce friction, fluid friction.</p> <p>Activities : (1) Force of friction depends on nature of surfaces in contact.</p> <p>(2) Wear and tear of moving objects.</p> <p>(3) To collect and display pictures of some sports and actions where friction is necessary or evil.</p>
07.09.2015 to 11.09.2015	<p>Lesson-8 : Cell structure and functions</p> <p>Introduction, discovery of the cell, the cell, organisms, show variety in cell number, shape and size, cell structure and function.</p> <p>Activities : (1) To understand the working of a microscope.</p> <p>(2) To study the structure of unicellular organisms with the help of permanent slide.</p>
10.09.2015	<b>UNIT TEST-III</b>

14.09.2015 to 19.09.2015	Lesson-8 : Cell structure and functions (contd...) Parts of the cell, comparison of plant and animal cells. Activities : (1) To prepare a temporary mount of onion peel. (2) To prepare a temporary mount of cheek peel (inner part of mouth)
21.09.2015	<b>Preparation of SA-1</b>
22.09.2015 to 09.10.2015	<b>SA-1 (First Term Paper)</b>
12.10.2015 to 17.10.2015	Lesson-4 : Materials : Metals and Non-Metals Introduction, physical properties of metals and non-metals, chemical properties of metals and non-metals reaction with oxygen, reaction with water. Activities : (1) To study the physical properties of metals and non-metals. Table 4.1 and 4.2 (NCERT). (2) To study the nature of oxides of metals and non-metals.
19.10.2015 to 22.10.2015	<b>AUTUMN BREAK</b> Presentation on biography on eminent scientist.
23.10.2015	<b>H.W. Check</b>
26.10.2015 to 31.10.2015	Lesson-4 : Materials : Metal and non-metals Chemical properties of metals and non-metals – reaction with acid, reaction with bases, displacement reaction uses of metals and non-metals. Activities: (1) Displacement reaction (2) Reaction of metals and non-metals with acids (Table 4.5 NCERT)
02.11.2015 to 07.11.2015	Lesson-13 : Sound Introduction : Sound is produced by a vibrating body; sound produced by humans, sound needs a medium for propagation, structure and function of human ear. Activities: (1) Make a list of musical instruments and parts of these instruments that vibrate to produce sound. (2) To study the structures of human ear with the help of model/chart.

09.11.2015 to 13.11.2015	Lesson-13 : Sound (contd...) Characteristics of sound : Amplitude, time period, frequency, loudness and pitch, audible and inaudible sound, noise and music, noise pollution. Yuva Session : 3.10 “End it before it ends us”!
16.11.2015 to 21.11.2015	Lesson-9 : Reproduction in animals Introduction, modes of reproduction, sexual reproduction – mole reproductive organs, female reproductive organs, fertilization. Activity : (1) To study the various modes of a sexual reproduction with the help of permanent slides (Hydra and Amoeba) (2) Preparation of NMMS examination.
23.11.2015 to 28.11.2015	Lesson-9 : Reproduction in Animals Development of embryo, viviparous and oviparous animals, young ones to adults, a sexual reproduction – budding and binary fission. Activity : To study the life cycle of frog with the help of chart / model.
26.11.2015	<b>UNIT TEST-IV</b>
30.11.2015 to 05.12.2015	Lesson-6 : Combustion and flame Introduction, combustion, how do we control fire? Types of combustion, flame, structure of flame, fuel, fuel efficiency. Activities: (1) To study the parts of flame. (2) To prepare a model of fire extinguisher. (3) Skit on the causes and prevention of fire in school and at home (disaster management).
07.12.2015 to 11.12.2015	Lesson-10 : Reaching the age of adolescence. Introduction: Adolescence and puberty, changes at puberty, secondary sexual characters, role of hormones in initiating reproductive function, reproductive phase of life in humans. Activities: (1) To collect newspaper cutting and information on AIDS. (2) AIDS awareness related activities.

14.12.2015 to 19.12.2015	<p>Lesson-10 : Reaching the age of adolescence (contd...)</p> <p>How is the sex of baby determined? Hormones other than sex hormones, role of hormones in completing the life history of insects and frogs, reproductive health.</p> <p>Activity : To study the position of endocrine glands in human – body with the help of a chart.</p> <p>Yuva session : 8.11 “Who is healthy?”</p>
21.12.2015 to 26.12.2015	<p>Lesson-16 : Light</p> <p>Introduction, laws of reflection, regular and diffused reflection.</p> <p>Activity : To verify the laws of reflection.</p>
28.12.2015 to 30.12.2015	<p>Lesson-16 : Light (contd...)</p> <p>Multiple reflection, multiple images, sunlight – white or coloured human eye structure and function, care of eyes, visually challenged persons can read and write, braille system.</p> <p>Activities: (1) To study the structure of human eye with the help of a model / chart.</p> <p>(2) To make your own kaleidoscope.</p>
31.12.2015 to 15.01.2016	<p style="text-align: center;"><b>WINTER BREAK</b></p> <p>To visit the nearest fire station with parents if feasible and make a note on its working.</p>
16.01.2016	<p style="text-align: center;"><b>HOME WORK CHECK</b></p>
18.01.2016 to 23.01.2016	<p>Lesson-13 : Some Natural Phenomenon</p> <p>Introduction, lightning, charging by rubbing, types of charges and their interaction, transfer of charge, the story of lightning, lightning safety.</p> <p>Activity : To prepare a model of electroscope / lightning conductor / charged detector.</p>
25.01.2016 to 30.01.2016	<p>Lesson-15 : Some natural phenomenon (contd...)</p> <p>Earthquakes, what causes an earthquake, seismic zones, richter scale prevention against earthquake.</p> <p>Activity : To write a report on any one disaster / earthquake / fire lightning / flood / tsunami / tornado / cyclone.</p> <p>Yuva Session : 3.6 “If there was a natural disaster threat!”</p>

01.02.2016 to 06.02.2016	<b>Revision Lessons-4,8,9</b>
08.02.2016 to 12.02.2016	<b>Revision Lessons-12,13,6</b>
15.02.2016 to 18.02.2016	<b>Revision Lessons-10,15,16</b>
19.02.2016 to 24.03.2016	<b>Summative Assessment-II Announcement of Result</b>