

Subject : Science  
 Grade : VII  
 Year : 2019-20



**Year Planner**

**Text book used: Science Now Revised(Collins)**

Month& No. of Teaching Days	Units	Sub Units	Objectives	Activities Planned	Evaluation
March/April (15)	3. The World of Living  1. Food	Lesson: 8 Soil(Introduction)  Lesson:1 Nutrition in Plants	Enable the students to understand the concept of <ul style="list-style-type: none"> <li>soil formation, profile, composition and properties</li> <li>types of soil and their suitability for crops Soil erosion and pollution enable to students to recognise</li> <li>how autotrophic plants make food by photosynthesis</li> <li>heterotrophic nutrition in plants</li> </ul>	<p><b>Text book activity</b></p> <ul style="list-style-type: none"> <li>To observe the absorption capacity and percolation rate of different soils</li> <li>Lab activity in textbook To demonstrate presence of starch in a leaf after photosynthesis</li> </ul>	<b>Worksheet-1</b>
June (15)	7. Natural Resources  2. Materials  2. Materials	Lesson :17. Forest: Our Lifeline (Briefing Lesson)  Lesson: 3 Fibre to Fabric  Lesson:6 Heat and Temperature	<p>Enable the students to understand the</p> <ul style="list-style-type: none"> <li>profile of forest and their uses</li> <li>interdependence of plants and animals, destructions of forests and conservation of forest</li> </ul> <p>Enable the students to</p> <ul style="list-style-type: none"> <li>identify the sources of wool</li> <li>describe the steps involved in wool production and hazards associated with it</li> <li>draw and explain the life cycle of silk moth</li> <li>describe the process of sericulture</li> </ul> <p>Enable the students to</p>	<ul style="list-style-type: none"> <li>Group discussion</li> <li>preparing posters on 'Save paper' in the notebook</li> <li>Watch videos on wool production and sericulture</li> <li>Flame test to identify natural and artificial fibres- lab activity pg. 42</li> </ul>	<p><b>Slip Test -1</b></p> <p><b>Worksheet -2</b></p>

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			<ul style="list-style-type: none"> <li>Define temperature and recognize different types of thermometer</li> <li>Solve numerical problems on temperature</li> <li>Identify and differentiate between the three modes of heat transfer</li> </ul>	<ul style="list-style-type: none"> <li>Lab activity to show the process of Conduction, Convection and Radiation. pg 86,87,88</li> </ul>	
July (24)	1.Food  2.Materials  6. Natural Phenomena	Lesson: 2 Nutrition in Animals  Lesson:4 Chemicals and Chemical Changes  Lesson: 14 Wind and Storm (Briefing Lesson)	Enable the students to <ul style="list-style-type: none"> <li>identify the stages of nutrition in animals</li> <li>identify the types of teeth in humans</li> <li>describe the process of digestion in humans and ruminants</li> </ul> Enable the students to <ul style="list-style-type: none"> <li>differentiate between elements, compounds and mixtures</li> <li>identify chemical formulae and symbols</li> <li>identify types of changes and their applications</li> </ul> Enable the students to <ul style="list-style-type: none"> <li>differentiate between storms, cyclones and tornadoes</li> <li>understand the formation of wind</li> <li>understand why wind currents are formed</li> </ul>	<ul style="list-style-type: none"> <li>Role play on digestion in humans</li> <li>Demonstration of chemical reactions and crystallization</li> <li>Activity to show how high speed wind reduces air pressure</li> </ul>	<b>Slip Test -2</b>  <b>Worksheet-3</b>  <b>Periodic Test I</b>

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			identify safety measures to be taken during these natural disasters		
August (22))	2.Materials	Lesson:5 Acids Bases and Salts  REVISION	Enable the students to <ul style="list-style-type: none"> <li>identify the properties of acids, bases and salts</li> <li>Know about indicators and how salts are formed</li> </ul> REVISION FOR HALF YEARLY EXAM	<ul style="list-style-type: none"> <li>Testing substances for acidity or basicity</li> <li>Observe Neutralization reactions</li> </ul>	<b>Slip test-3</b> <b>Worksheet -4</b> <b>Slip test-4</b> <b>Worksheet-5</b>  <b>Subject Enrichment Assessment -I</b>
September (18)	REVISION FOR HALF YEARLY EXAM				<b>Revision Worksheet-1</b>  <b>Half Yearly Examinations ( PT-2)</b>
October (17)	2.The World of Living  6. Natural Phenomena	Lesson:9 Respiration in Organisms  Lesson:15 Light	Enable the students to <ul style="list-style-type: none"> <li>identify the organs of breathing in animals</li> <li>identify the respiratory organs in humans and the path of respiration</li> <li>compare aerobic and anaerobic respiration</li> <li>understand breathing mechanism in plants</li> </ul>	<ul style="list-style-type: none"> <li>Model making to show the working of lungs and diaphragm</li> <li>Identifying persistence of vision with Newton's disc</li> </ul>	

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			Enable the students to <ul style="list-style-type: none"> <li>• identify the unique features of light, mirrors and lenses</li> <li>• differentiate between mirrors and lenses and know their applications</li> <li>• appreciate the principle of Newton's disc</li> </ul>	<ul style="list-style-type: none"> <li>• Formation of Images by lens and mirrors</li> </ul>	<b>Worksheet-6</b>
November (22)	5. How Things Work  7. Natural Resources	Lesson:13 Electric Current and its Effects  Lesson:16 Water (Briefing Lesson)	Enable the students to <ul style="list-style-type: none"> <li>• understand what electricity is and the components of electric circuit</li> <li>• draw circuit diagrams</li> <li>• recognize the heating and magnetic effects of current</li> <li>• study the applications of electromagnets</li> <li>• identify forms, uses and sources of water.</li> <li>• list and explain the causes of water scarcity</li> <li>• list the steps to conserve water</li> </ul>	<ul style="list-style-type: none"> <li>• Model making : Construct a Solenoid and observe its magnetic effect</li> <li>• Group Activity: Soft board decoration with the Posters on Conservation of Water</li> </ul>	<b>Worksheet -7</b>  <b>Slip Test-5</b>  <b>Worksheet-8</b>
December (20)	3.The World of the Living	Lesson:11 Reproduction in Plants  Lesson:12 Time and Motion	Enable the students to <ul style="list-style-type: none"> <li>• identify different types of reproduction in plants and compare them</li> <li>• identify agents of pollination and seed dispersal methods</li> </ul>	<ul style="list-style-type: none"> <li>• Observation of vegetative reproduction in plants in lab</li> <li>• Dissection of flower</li> <li>• Plotting a graph on uniform and non-uniform motion</li> </ul>	<b>Slip Test-6</b>  <b>Worksheets-9 &amp; 10</b>

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	4. Moving Things People and Ideas		<ul style="list-style-type: none"> <li>• understand the need to measure time</li> <li>• identify the types of motion and plot graphs</li> <li>• calculate speed</li> </ul>	<ul style="list-style-type: none"> <li>• Measurement of time period (170)</li> </ul>	
January (19)	2.The World of the Living	Lesson:10 Transportation of Substances	<p>Enable the students to</p> <ul style="list-style-type: none"> <li>• understand the importance of transport of substances in a living body</li> <li>• identify the organs of circulatory system and their functions</li> <li>• understand the mechanism of transportation in plants</li> <li>• recognize the organs of excretory system and their functions</li> </ul>	<ul style="list-style-type: none"> <li>• To examine the effect of exercise on heartbeat and pulse rate.</li> </ul>	<b>Worksheet-11</b>  <b>Periodic Test -3</b>
	7. Natural Resources	Lesson:18 Waste Water Management	<p>Enable the students to</p> <ul style="list-style-type: none"> <li>• recognize the sources of waste water</li> <li>• identify the steps involved in waste water treatment</li> <li>• list the alternative methods of waste water management</li> </ul>	<ul style="list-style-type: none"> <li>• Watch visuals on Waste Water Management</li> </ul>	<b>Subject Enrichment Evaluation-2</b>
February (15)	REVISION REVISION FOR THE ANNUAL EXAM				<b>Revision Worksheet- 2</b>  <b>ANNUAL EXAMINATIONS</b>