

Term Wise Syllabus
Session – 2019-20
Class-VII (Pratibha)
Subject: Science

Term-I (April 2019 To September 2019)

Theme	Content	Suggestive Learning Outcomes	Suggestive Activities
Food	Ch-1: Nutrition in Plants ❖ Mode of Nutrition in plants. ❖ Photosynthesis-food making process in plants. ❖ Other modes of nutrition in plants ❖ Saprotrophs ❖ How nutrients are replenished in the soil	<ul style="list-style-type: none"> • Identify different organisms on the basis of mode of nutrition. • Write word equation for photosynthesis • Draw labelled diagrams or flow chart of the process of photosynthesis. • Explain process of photosynthesis in plants • Conduct investigations to seek the answer that leaves other than green also carry photosynthesis 	1.To show light is essential for photosynthesis. 2.Collect leaves of different Colours – check that photosynthesis also occur in these coloured leaves. 3.Growing fungi on a bread. Observe the patches on the bread under a microscope or with the help of magnifying glass and write the observation in your note book. <i>Refer Science Pragati for the activities.</i>
Food	Ch-2 :Nutrition in Animals ❖ Different ways of Taking Food ❖ Digestion in Humans ❖ Digestion in Grass-Eating Animals ❖ Feeding and Digestion in Amoeba	<ul style="list-style-type: none"> • Identify types of teeth • Differentiates organisms on the basis of the process of digestion , • Explain process of digestive system in animals and human • Draw labelled diagram or flow charts of digestive system in human . 	1.Effect of saliva on starch. 2.Study with suitable learning materials a.Human Digestive System, b.Different types of teeth and their arrangement in mouth c.Movement of the food in the alimentary canal. d.Digestive system of Ruminant. e.Permanent slide of Amoeba 3.To find the position of taste buds with the help of edible things brought by the students. <i>Refer Science Pragati for the activities.</i>
Material	Ch-3 :Fibre to Fabric Animal fibre ❖ Wool ❖ Silk	<ul style="list-style-type: none"> • Identifies animal fibres • Classify fabrics based on the characteristics of its fibre. • Differentiate between animal and plant fibre 	1. Draw/paste pictures of animals whose hair is used as wool. 2. Draw/paste stages of the life history of silk moth. <i>Refer Science Pragati for the activities.</i>

		<p>by observing the steps of their processing .</p> <ul style="list-style-type: none"> • Draw labelled diagram or flow chart of life cycle of silk-moth. 	
Material	<p>Ch-4 :Heat</p> <ul style="list-style-type: none"> ❖ Hot and Cold ❖ Measurement of temperature ❖ Laboratory thermometer ❖ Transfer of heat ❖ Kinds of clothes We wear in summer and winter 	<ul style="list-style-type: none"> • Understand and Differentiate the meaning of cool / cold and warm / hot • Construct model of thermometer using resources available in their surroundings and explain its working . • Measure temperature. • Differentiate among the processes of modes of transfer of heat. • Differentiate substances as conductors or insulators of heat. • Apply the learning of scientific concepts in their daily life like what kinds of clothes help us to keep warm during winters ? 	<ol style="list-style-type: none"> 1. Experiment to show that ‘hot’ and ‘cold’ are relative. 2. Reading a clinical and laboratory thermometer. 3. Experiment to show Conduction, Convection and Radiation. <p><i>Refer Science Pragati for the activities.</i></p>
Material	<p>Ch-6: Physical and Chemical changes</p> <ul style="list-style-type: none"> ❖ Physical changes ❖ Chemical changes ❖ Rusting of Iron ❖ Crystallisation 	<ul style="list-style-type: none"> • Classify physical and chemical changes. • Write word equation for chemical reactions. • Take measures to prevent corrosion by relating cause with its effect . • Apply learning of scientific concepts in day to day life thus preventing corrosion. • Understand the cause like why is sea water salty? • Understand the reason of a cause like Is it possible to separate salt from sea water? 	<ol style="list-style-type: none"> 1. Activities showing physical changes like what gets deposited on a Tawa or Kadai when left in a moist state . 2. Experiments involving chemical reactions like rusting of iron , Neutralisation(vinegar and baking soda),Displacement of copper from copper sulphate etc. 3. Make crystals of easily available substances. <i>Refer Science Pragati for the activities.</i>
Moving things , People and Ideas	<p>Ch- 13: Motion and Time</p> <ul style="list-style-type: none"> ❖ Slow or fast speed ❖ speed ❖ Measurement of time ❖ Measuring speed ❖ Distance time Graph 	<ul style="list-style-type: none"> • Observe and analyse motion as slow/fast . • Appreciate the idea of time and need to measure it(like measuring time with wrist watch / stop watch) • Analyse the constancy of time period of pendulum etc. • Measure and calculate speed of moving objects , 	<ol style="list-style-type: none"> 1. Observing the motion (slow or fast) of common objects. 2. Measure the distance covered by objects moving (with in school)in a given time and calculating their speeds . 3. Plot distance vs. time graph for uniform motion. 4. Measure the time taken by a moving objects

		<ul style="list-style-type: none"> • Measure the physical quantities and express their SI units. • Plot and interpret distance-time graph. 	(toy cars) to cover a given distance and calculate their speeds. 5. To observe the motion of the of a simple pendulum and its time period <i>Refer Science Pragati for the activities.</i>
Revision of Syllabus for Mid – Term Examination-2019			

Term-II (October 2019 To March 2020)

Theme	Content	Suggestive Learning Outcomes	Suggestive Activities
Material	Ch- 5:Acids, Bases and Salts ❖ Acids and Bases ❖ Natural Indicators around us ❖ Neutralisation ❖ Neutralisation in everyday life.	<ul style="list-style-type: none"> • Classify substances as acidic , basic and neutral substances. • Conduct simple investigation like – Extract of coloured flowers be used as acid-base indicator . • Learn to handle experiments with care. • Write word equation for Acid- Base reactions . • Apply learning of scientific concept in day to day life – like dealing with Acidity, treating the stings of ants etc. 	<ol style="list-style-type: none"> 1. Testing solutions of common substances like sugar, salt, vinegar, limejuice etc with indicators like Litmus ,Turmeric , China rose or any other. 2. To study neutralisation reaction. 3. To prepare a card with Turmeric paste and soap solution. <i>Refer Science Pragati for the activities.</i>
The world of the living	Ch-10: Respiration in Organisms ❖ Why do we respire - Breathing ❖ How do we breath ❖ What do we breath out? ❖ Breathing in other animals ❖ Breathing under water ❖ Do plants also respire?	<ul style="list-style-type: none"> • Identify organisms on the basis of respiratory organs. • Classify the types of respiration, • Explain the process of respiration in human. • Draw the labelled diagram of respiratory system of human. • Write the word equation of chemical reactions of Aerobic and anaerobic respiration. 	<ol style="list-style-type: none"> 1. To study mechanism of breathing in human 2. Prepare working model of Lungs. 3. Experiment to show plants and animals respire like what do we breathe out ? What do plants breathe out ? And breathing rate . 4. Effect of exhaled air on lime water. <i>Refer Science Pragati for the activities.</i>
The world of living	Ch-11: Transportation in Animals and Plants ❖ Circulatory system ❖ Excretion in animals ❖ Transport of substances in plants.	<ul style="list-style-type: none"> • Explain the process of Circulation in human. • Draw the labelled diagram of human heart and Excretory system. • Draw the schematic diagram or flow chart of Circulation and excretion 	<ol style="list-style-type: none"> 1. With the help of suitable aids study and draw labelled diagram of <ol style="list-style-type: none"> a. Schematic diagram of Circulation b. Sections of Human Heart c. Human Excretory system d. Transport of food, water and minerals in

		<ul style="list-style-type: none"> • Understand the cause of a process, like why heart beat is faster after exercise etc. • Measure and calculate pulse rate. • Construct the model of stethoscope from the available resources and know its use . • Differentiate the transport of material in human and plants and it's importance in plants . • Understand the cause and effect of transpiration in plants. 	<p>a section of root of a plant. e. Transportation of water through cells</p> <p>2. Prepare Model of stethoscope.</p> <p><i>Refer Science Pragati for the activities.</i></p>
The world of living	Ch-12: Reproduction in Plants <ul style="list-style-type: none"> ❖ Mode of reproduction ❖ Sexual Reproduction ❖ Fruits and seed formation seed dispersal 	<ul style="list-style-type: none"> • Classify types of reproduction in plants • Identify reproductive parts of the plant. • Differentiate unisexual and bisexual flowers. • Compare between wind pollinated and insect pollinated flowers. • Understand the cause of dispersal of seeds by different means. • Observe fruits and seeds development in plants • Apply learning of scientific concepts in cultivation by vegetative propagation. 	<p>1.To grow a plant by vegetative propagation. 2.To identify reproductive parts of a flower. 3.Make a collection of winged, hairy and spiny seeds.</p> <p><i>Refer Science Pragati for the activities</i></p>
How things work	Ch-14: Electric current and Its effects <ul style="list-style-type: none"> ❖ Symbols of electric components ❖ Heating effects of electric current ❖ Magnetic effect of electric current ❖ Electromagnet 	<ul style="list-style-type: none"> • Differentiate materials on the basis of conductivity like good and bad conductor of electricity. • Understand and relate the process of heating and magnetic effects of current. • Draw labelled diagram of electric circuits. • Apply learning of scientific concepts in daily life like connecting two or more cells in proper order in devices • Make the model of electromagnet from the resources available in their surroundings. 	<p>1.To make a simple electric circuit and draw its diagram. 2.To demonstrate</p> <ol style="list-style-type: none"> a. heating effect of electric current. b. Magnetic effect of current. c. To make a model of electromagnet . <p><i>Refer Science Pragati for the activities</i></p>

Natural Phenomena	Ch-15: Light ❖ Light travels along a straight line ❖ Reflection of light. ❖ Right or left playing with spherical mirrors. ❖ Sunlight white or coloured ?	<ul style="list-style-type: none"> • Identify mirrors and lenses on the basis of their function • Differentiate images formed by mirrors and lenses on the basis of its properties. • Conduct investigation like—Is white light composed of many colours ? • Construct model of Seven colour disc from the resources available in their surroundings. 	<ol style="list-style-type: none"> 1. Experiment to see the source of light through a straight and bent tube . 2. Observation of reflection of light on wall or white paper screen . 3. Images made by different objects and recording the observations. 4. To identify and distinguish among plane , concave and convex mirrors, and also between concave and convex lenses 6. Making a disc with seven colours and observe it when it rotates. <i>Refer Science Pragati for the activities.</i>
Moving things	Ch- 13: Motion and Time	Same as done for Mid-term Examination	
<ul style="list-style-type: none"> ❖ Complete the syllabus by January 2020. ❖ Revision of Syllabus ❖ Common Annual School Examination(CASE) 2019-20 			