

P M ENGLISH MEDIUM SCHOOL, DHINOJ
Yearly Plan - Grade 7
Academic Session 2024-25

Subject: Science

TERM 1

MONTH	No. of teaching Days	Chapter Details	Experiment	Activity	Learning Outcomes	Field Trip
APRIL	21	<p>Chapter-1 Nutrition In Plants</p> <p>Chapter-2 Nutrition in Animals</p>	<p>CH-1 Exp- 1&2 In Lab-Manual</p> <p>CH-2 Ex-3&10 in Lab manual</p>	<p>CH-1 1.To observe the Guard cells under microscope 2. To grow and observe bread mold.</p> <p>CH-2 1.Bring different food materials and observe from which tooth the chewing is happening 2. To observe the effect of saliva on starch.</p>	<p>CH-1</p> <p>Identify different organisms on the basis of mode of nutrition. Evaluate other plants in their surroundings & classify them as autotrophs, heterotrophs, saprotrophs, parasitic or symbiotic based on their nutritional requirements</p> <p>CH-2</p> <p>Summarize the functions of the Human digestive system. Compare & contrast the features of digestive system of</p>	
					grass-eating animals with those of humans	

JUNE	16	<p>Chapter-4 Acid, Bases, and salts.</p> <p>Chapter 5 Physical & chemical changes</p>	<p>CH-4 Exp-5.1,5.2&8 lab manual.</p> <p>CH-5 Exp:16.1&16.2</p>	<p>CH-4 1.To observe the effects of different indicators on Acid, bases, and neutral substances 2.To observe the neutralization reaction using laboratory indicator.</p> <p>CH-5 1. To observe the burning of magnesium ribbon and test its nature 2. To observe the colour change of copper sulphate due to reaction with iron. 3. Formation of Crystals of copper</p>	<p>CH-4</p> <p>1. Differentiate between acidic, basic, and neutral substances based on their properties.</p> <p>2. Explain the process of neutralization</p> <p>3. Conduct investigation to find out the extract of colored flower can be used as indicators.</p> <p>4. Write word equations for acidbase reactions.</p> <p>5. Apply learning of scientific concept in dealing with acidity or treating with soil</p> <p>CH-5</p>	
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				<p>sulphate.</p>	<p>1. Differentiate between physical and chemical change. 2. Apply learning of scientific concepts in day-to-day life in taking measures to prevent corrosion 3. Classify the changes as physical or chemical changes. 4. Write a word equation for corrosion.</p>	
JULY	24	<p>Chapter- 13 Waste water story (Project) Chapter - 11 Light.</p>	<p>CH-11 19,20&25 IN lab -manual.</p>	<p>Ch-11 1. To show the reflection of light. 2. To observe the image on the screen by concave and convex mirror 3. To observe the image by using concave and convex lens. 4. To observe the dispersion of light by</p>	<p>1. Analyze the uses of water in everyday life in order to identify various sources of contamination. 2. Outline factors responsible for scarcity of clean water and list some water borne diseases 3. Suggesting methods for treatment</p>	IFCO

				<p>using prism.</p>	<p>of polluted water for reuse.</p> <p>4.Makes effort to follow good practices for sanitation at public places.</p> <p>5. Make effort to Minimize the generation of pollutants.</p> <p>CH-11</p> <p>1.Observe and describe image formed by plane mirror.</p> <p>2. Outline the importance and uses of spherical mirrors and lenses.</p> <p>3.Identify different types of mirrors and lenses based on their texture and function.</p> <p>4. Differentiate between the images formed by the mirrors and lenses based on their structure and properties.</p> <p>5. Conduct a simple</p>	
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					<p>investigation to find out that white light is composed of many colors.</p> <p>6. Construct a model and explain the working of Newton's color disc</p>	
AUGUST	19	Chapter - 8 Reproduction in Plants	CH-8 Ex: 21&22	<p>CH-8</p> <ol style="list-style-type: none"> 1.To observe eyes of the potato from the potato. 2. To dissect a flower and observe its reproductive parts. 3..To observe yeast cell under microscope. 	<p>CH-8</p> <ol style="list-style-type: none"> 1. Define reproduction in order to identify its need. 2. Distinguish between two modes of reproduction that is sexual and asexual. 3. To learn different types of pollination. 4. Differentiate between unisexual and bisexual flowers. 5. Explain the structure of reproductive organs in plants. 6. Illustrate the structure of reproductive 	

					structure in plants. 7. Apply learning of scientific concept in cultivation by vegetative propagation.	
SEPTEMBER	Revision & Term-1Exam	Chapters1,2,4,5,8, 11&13				

TERM 2

MONTH	No. of teaching days	Chapter Details	Experiment	Activity	Learning Outcomes	Field Trip
SEPTEMBER	10	Chapter 3 : Heat	CH-3 Exp:4.1,4.2,11.1&11.2,13.2	CH-3 1. To teach students how to read a clinical thermometer 2. To teach students how to measure the temperature of hot water	CH-3 1. Distinguish between clinical, laboratory and digital thermometer (range, least count and units of measurement) 2. Explain the different modes of transfer of heat. 3. Differentiate between conductors	
				and cold water by using laboratory thermometer 3. To observe convection of heat in water.	and insulators of heat. 4. Measures and calculates the temperature of humans, hot water, cold water etc	

OCTOBER	18	<p>Chapter 12: Forest: Our Lifeline(Project)</p> <p>Chapter-9 Motion and Time</p>	CH-9 Ex:12 in lab-manual	<p>CH-9 To observe the time period of simple pendulum</p> <p>Extended learning To make a sand clock.</p>	<p>CH-12</p> <ol style="list-style-type: none"> 1. Explain the features of forests that are responsible for sustenance of life. 2. Sensitize others with the consequences of excessive consumption of natural resources. 3. Exhibit creativity for the judicious use of natural resources. <p>Ch- 9 :</p> <ol style="list-style-type: none"> 1. Finding the relation between distance, speed and time. 2. Calculate the speed of a moving objects. 3. Measure and calculate the time period of a simple pendulum. 4. Plot and interpret the distance-graph 	Serenity Club

NOVEMBER	17	Chapter-6 Respiration in Organisms	Exp: no 17 In lab manual	CH-7 1.To measure the breathing rate at different conditions 2.To measure the size of chest during inhalation and exhalation. 3. To make model to show the mechanism of breathing. 4.To observe the effect of exhaled air on lime water.	CH-7 1. Differentiate between aerobic and anaerobic respiration. 2. Apply the concept of Anerobic respiration in fermentation process. 3. Explain the process of respiration in animals and plants. 4. Write word equation for the process of respiration. 5. Illustrate the structure of respiratory organs of different organisms.	
DECEMBER	10	Chapter 7:Transport of Substances in		CH-7 1.To check the pulse rate by using index	. Explain the process of circulation and excretion in humans	

		Animals and Plants		finger on your wrist	and other organisms. 2. Explain the structure of human heart and kidney. 3. Explain the process of transportation of water, minerals, and food in plants. 4. Differentiate between xylem and phloem	
JANUARY	22	Chapter 7 : Transport of Substances in Animals and Plants Continue..... Chapter:10 Electric current and its effects	Ex: 23 in lab-Manual	1. To check the activity of xylem tissue. 2. Extended learning: To know about different blood groups CH-10 1. To make an electric circuit by using different components. 2. To make an electromagnet by using iron material,	5. Illustrate the structure of the human circulatory system and excretory system. 6. Construct a model of stethoscope and explain its working. 7. Measure and calculate pulse rate Ch-10 1. Applies learning of scientific concepts in connecting two or more electric cells in proper order in	

				insulated Wire, battery	devices. 2. Construct a model of electromagnet and explain its function. 3. Explain the processes of heating and magnetic effects of electric current. 4. Illustrate the structure of an electric circuit	
FEBRUARY	18	Revision				
MARCH	ANNUAL EXAM	Chapters:3,6,7, 9,10 and 12				