

Academic Planner 2025-26

Class-VII

SUBJECT - SCIENCE

MONTHS & DAYS	CONTENTS	Learning Outcome	ACTIVITY / EXPERIMENT	ASSIGNMENT/H.W	MODE OF ASSESSMENT	INTERDISCIPLINARY ASPECT/ SUSTAINED IMPACT-SDG	21ST CENTURY SKILLS	TEACHING PEDAGOGY
APRIL 1-15	Bridge Course							
April 16 - 30 (12 days)	Chapter 1 Nutrition in plants	-distinguish between autotrophic and heterotrophic nutrition; saprophytic and parasitic nutrition - to observe and draw conclusions of activities - name the different modes of heterotrophic nutrition in plants and give examples of each type - list ways of replenishing nutrients in the soil	To show that plants prepare food during day time Science lab manual activity of Ch 1	Thinksheet of ch 1 Educsoft online assessment	Science Concept Cards and interactive quizzes	SDG 2 Economics in agriculture and earth sciences	Information literacy, critical thinking	Field Trip, Survey based
	Chapter 2 Nutrition in animals and human	- List the mode of feeding in different animals - List the steps in the process of holozoic nutrition (in humans) - Distinguish between the different kinds of teeth in the mouth and state their functions - Draw well labelled diagrams of - structure of a tooth ; human digestive	To study the effect of saliva on starch. Science lab manual activity of Ch 2	Thinksheet of ch 2 Educsoft online assessment	Role play on parts of digestive system and exit slips	S.D.G Worksheet 3 Goal 3 SDG 2 and SDG 3 Social studies and different culture with food	Creativity, communication, critical thinking	Demonstration method
MAY								
1 - 15 (11 days)	Chapter 3 Heat	-distinguish between clinical and laboratory thermometer; conductors and non conductors of heat; land and sea breeze -draw a clinical and laboratory thermometer -distinguish between the three modes of transmission of heat (conduction ,convection and radiation) - give examples of applications in daily life where heat transfer takes place by conduction ,convection and radiation	To record the temperature of water using laboratory thermometer. Science lab manual activity of Ch 3	Thinksheet of ch 3 Educsoft online assessment	Concept mapping and exit slips	SDG 13 and SDG 12 Maths conversion of celcius to fahrenheit scale	Information literacy, problem solving, critical thinking	Inquiry based learning, Lecture method
MAY								
16-25 (8 days)		Science activity week	SCIENCE IS FUN 1. Simple DIY science experiments demonstration by students 2. Science quiz					
JUNE	SUMMER VACATION		H.H.W			Art Integrated activities/ project		
JULY								
1- 15 (12 days)	Chapter 4 Acid,Base And Salts	-distinguish between mineral and organic acids ; acids and base - list effect of different indicators on acids and bases - define indicator ,alkali , neutralisation - give examples of neutralisation (of acids and bases) in everyday life	To classify the given solutions as acidic and basic using litmus solution Science lab manual activity of Ch 4	Thinksheet of ch 4 Educsoft online assessment	Experimentation and Observation and MCQ test	SDG 13, SDG 14 and SDG 15 Maths in neutralization	critical thinking, communication	Experiential Learning
16 - 31 (14 days)	Chapter 5 Physical and Chemical changes	Distinguish between reversible and irreversible changes ; physical and chemical changes - Give examples from daily life of reversible and irreversible changes ; chemical and physical changes - Observe activities based on chemical and physical/ reversible and irreversible changes and draw conclusions - List ways of preventing rusting - Define rusting ,crystallisation, galvanisation	To study the chemical reaction between iron nail and copper sulphate solution. Science lab manual activity of Ch 5	Thinksheet of ch 5 Educsoft online assessment	Experimentation and Observation and MCQ test	SDG 11 and SDG 13 History and technology used changes to create new things	critical thinking, reasoning	Experiential Learning
	U.T 1 21 July- 26 July		Syllabus for unit test 1					

			Ch 1- Nutrition in Plants Ch 2-Nutrition in animals Ch 3- Heat					
AUGUST								
1- 15 (11 days)	Chapter 6 Respiration in Organisms	-distinguish between aerobic and anaerobic respiration; breathing and respiration; inhalation and exhalation; respiration and photosynthesis - draw a well labelled diagram of the human respiratory system -demonstrate the mechanism of breathing in humans through a model -name the organs of breathing in different animals -explain how plants respire	10.2 To Show that exhaled air contains Carbon dioxide. Science lab manual activity of Ch 6	Thinksheet of ch 6 Educsoft online assessment	Model making	SDG 15	critical thinking, creativity	Experiential Learning
16-31 (12 days)	Chapter 7 Transportation in	-distinguish between RBC and WBC ; artery and vein ; xylem and phloem -define capillary, blood, pulse , pulse rate, heart beat,translocation, transpiration - label the human heart -explain and draw schematic diagram of blood circulation in the human body -Draw a well labelled diagram of the urinary system in humans -give examples of solid, liquid and gaseous waste generated in the human body	To measure pulse rate under different conditions Science lab manual activity of Ch 7	Thinksheet of ch 7 Educsoft online assessment	Model making	SDG 3	critical thinking, creativity	Experiential Learning
SEPTEMBER	Exam Month							
1- 15 (11 days)	Revision							
16 - 30 (12 days)	HALF YEARLY EXAMS 15 Sept- 26 Sept		SYLLABUS OF HALF YEARLY					
			Chapter 1 - Nutrition in plants					
			beings					
			Chapter 3 - Heat					
			Chapter 4 - Acid,Base And Salts					
			Chapter 5 - Physical and Chemical changes					
			Chapter6 - Respiration in organisms					
			Chapter 7- Transportation in Animals and Plants					
OCTOBER								
1- 15 (08 days)	Reproduction in Plants	-distinguish between asexual and sexual reproduction; unisexual and bisexual flowers - explain the different modes of asexual reproduction in plants and with examples -draw well diagrams of budding in yeast , binary fission in bacteria, male and female reproductive organs of a flower -explain different methods of vegetative propagation with examples	To grow a new plant through vegetative propagation Science lab manual activity of Ch 8	Thinksheet of ch 8 Educsoft Online Assessment	Assessment of diagramatic skills	SDG 15	critical thinking, communication	Field trip, cooperative and collabrative learning
16 - 31 (10 days)	Chapter 9 Motion and time		To find the time period of a simple pendulum Science lab manual activity of Ch 9	Thinksheet of ch 9 Educsoft Online Assessment	Data analysis	SDG 11		Experiential learning, demonstration method
						Maths- graphs for D-T		
NOVEMBER								
1- 15 (11 days)	Chapter 10 Electric current and its Effects	-draw some electrical symbols ; closed and open circuits using symbols; an electric bell -distinguish between closed and open	To show the heating effect of current	Thinksheet of ch 10	MCQ test		critical thinking, reasoning	Demnstration method, Lecture method

		circuit - explain the heating , magnetic effects of electric current -give examples of the applications of heating effect of electric current from daily life(electric bulb ,electric fuse etc) - give an example of magnetic effect of electric current (electromagnets) in the working of an electric bell -list the uses of electromagnets in daily life	Science lab manual activity of Ch 10	Educosoft Online Assessment	SDG 11 and SDG 12	Uses of electricity in technology to create gadgets		
16 - 30 (12 days)	Chapter 11 Light	Distinguish between parallel, convergent and divergent beam of light; plane, concave and convex mirrors; concave and convex lens; real and virtual images; -draw a diagram to explain that light travels in a straight line -draw diagrams of- parallel, convergent, divergent beam of light ; concave and convex mirrors and lenses - give examples the uses of plane mirrors, concave and convex mirrors and lenses in daily life -list the type of images formed by plane , concave, convex mirrors; concave and convex lenses -explain how dispersion of light results in the formation of a	To show that sunlight is a combination of seven colors	Thinksheet of ch 11	Experimentation and Observation, Model making		critical thinking	Experiential Learning, demonstraton method
			Science lab manual activity of Ch 11	Educosoft Online Assessment		Technology integration in		
DECEMBER								
	U.T 2 8 Dec-15 Dec							
	Syllabus for unit test 2		Ch 8- Reproduction in Plants Ch 9- Motion and Time Ch 10- Electric current and its effects					
1- 15 (12 days)	Chapter 12 Forest Our Lifeline	- List the importance of forests - distinguish between - herbs ,shrubs and trees .producers ,consumers and decomposers - name in the layers forests - draw simple food chains - explain the interdependence of plants and animal		Educosoft Online Assessment	Think, pair and share	WORKSHEET 13 GOAL 15	critical thinking	Collaborative learning
			Science lab manual activity of Ch 12	Thinksheet of ch 12				
16-31 (13 days)	Chapter 12					SDG 6, 11 , 7 and 13 S.D.G		
JANUARY								
1-15			WINTER BREAK					
16-31 (13 days)	Chapter 13 Wastewater Story	-draw some electrical symbols ; closed and open circuits using symbols; an electric bell -distinguish between closed and open circuit - explain the heating , magnetic effects of electric current -give examples of the applications of heating effect of electric current from daily life(electric bulb ,electric fuse etc) - give an example of magnetic effect of electric current (electromagnets) in the working of an electric bell -list the uses of electromagnets in daily life		Thinksheet of ch 13	Think, pair and share	S.D.G WORKSHEET 6	critical thinking, collaborative learning	Collaborative learning
			Science lab manual activity of Ch 13	Educosoft Online Assessment		SDG 6, and 11 Social studies- role of govt in sanitation		
FEBRUARY								
1- 15 (11 days)				Educosoft Online Assessment				
	REVISION OF ANNUAL EXAM							
			CLASS RECORD ASSESSMENT					
16 - 28(12 days)	ANNUAL EXAM		Dates to be announced later					

	Annual Exam Syllabus		Ch 4- Acids, bases and salts Ch 5- Physical and chemical changes Ch 8- Reproduction in plants Ch 9- Motion and time Ch 10- Electric current and its effects Ch 11- Light Ch 12- Forest our lifeline Ch 13- Wastewater story					
MARCH								

1-31 (25 days)