

HAPPY DAYS SCHOOL, SHIVPURI (M.P.)

DEPARTMENT OF SCIENCE



CLASS-I

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	Term-1 1-About Self	Students will understand about myself.	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3.paste family photograph 4.Home assignment	1.Relevance to content 2.Neatness 3.Creativity, presentation	Draw or paste your likes.	Animated video based on myself
	2-My Body	Students will understand about body parts and their functions	Constructivist Inquiry based Approach	1. Worksheet 2. Home assignment	1.Relevance to content 2.Neatness 3.Creativity, presentation	Draw body parts	Animated video based on body parts, song based on body parts
	3-Sense organs	Students will understand about sense organs and their functions.	Constructivist Inquiry based Approach	1. Worksheet 2. Home assignment (Holidays homework)	1.Relevance to content 2.Neatness 3.Creativity, presentation	Draw sense organs Sensorial activity	Animated video based on sense organs, song based on sense organs.

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JULY	4 - Looking after My Body	Students will understand the importance of our body and its parts and good habits to stay healthy.	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3.Homeassignment	1.Relevance to content 2. Neatness 3.Clarity of thoughts	Activities based on indoor and outdoor games	Animated video based on good habits
	5-The clothes we wear	Students will understand that clothes protect us from heat and cold. We wear different types of clothes according to the seasons.	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3.Clarity of thoughts	Draw or paste the pictures of different types of clothes we wear	Animated video based on clothes we wear.
	6-Food we eat	Students will understand the importance of food and its varieties	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2.Neatness 3.Creativity, presentation	Discuss different types of meal. &draw your favorite food	Animates video based on healthy food.
AUGUST							
	7-Safety Rules	Students will understand the importance of safety rules and ways by which they can avoid accidents and keep Themselves safe.	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	Relevance to content Neatness Creativity, Presentation	Paste or draw any 5 things that are not safe to play.	Animated video based on safety rules.
	TERM 2 1-My Family	Students will understand importance of family and its types	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3 Creativity, Presentation	Paste the photographs of family members and make a family tree.	Animated video based on types families

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SEPTEMBER	2.We help one another		Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3Creativity, Presentation	Make a list of your family members and write the dates of their special days	Animated video based on helping one another
	3.We need shelter	Students will understand the importance of shelter, types of houses and roofs	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3Creativity, Presentation	Read the names of special houses and colour them	Animated video based on shelter and its types
	4. Rooms in a house	Students will understand the different kinds of rooms and their uses.	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3. Creativity, Presentation	Poem/Story based on types of room.	Animated video based on different types of room
OCTOBER							
	5- Our neighborhood	Students will understand importance of neighborhood and the People who lives in it are called neighbors.	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3Creativity, Presentation		Visit to school campus
	6-My School	Students will understand the importance of school and classroom, things which are used and the rooms in a school	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3Creativity, Presentation		Visit to school campus
NOVEMBER	7-People who help us	Students will understand the about our helpers and their work.	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3.Home assignment	1.Relevance to content 2. Neatness 3.Presentation, Creativity	Paste the pictures of any 5 helpers	Animated video based on helpers

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NOVEMBER	8.Festivals	Students will understand the about festivals	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2.Neatness 3.Presentation , creativity	Draw the pictures of your favourite festival. Make greeting cards for Diwali and Christmas	Animated video based on festivals
	1.Good manners and habits	Students will understand about habits and manners	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2.Neatness 3.Presentation, creativity	Draw the pictures of good habits	Animated video based on good habits and manners
DECEMBER	2.Travelling is fun	Students will understand the different means of transport	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2.Neatness 3.Presentation , creativity	Draw different pictures of different modes of transport	Animated video based on different modes of transport
	3.The world of plants	Students will understand different parts of plants and their importance	Constructivist Inquiry based Approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2.Neatness 3.Presentation	1.Nature walk 2. Draw different parts of plant 3. Paste different leaves	Animated video based on plant around us
JANUARY	4-The World of Animals	Students will understand about the different species of animals and the places where they are found		1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3.Presentation , creativity	Draw and Write the names of the animal and match to their homes.	Show video based on animals
	5-All about Water	Students will understand the importance of water, sources and ways to save water	Collaborative approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness 3.Presentation, creativity	Color the vessels used to store water.	Animated video based on sources of water.
	6-Up in the sky	Knowing about The Sun , Moon, sky, clouds	Constructivist, Collaborative approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness	Draw and color the rainbow	Animated video based on sky



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FEBRUARY 25	7-Earth Activity	Students will know about the natural things present on earth like mountains, forest, plains, hills, desert	Constructivist, Inquiry based approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness	Role play	Animated video based on Earth and types of land
	8- Weather Activity	Students will understand about the change in weather and seasons affect our life in the way we dress, things we do and food we eat.	Constructivist, Inquiry based approach	1.Worksheet 2.Portfolio 3. Home assignment	1.Relevance to content 2. Neatness	Role play	Animated video based on types of weather

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CLASS-II

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	1.Myself	Students will understand all about myself	Constructivist, inquiry based	Worksheet, Hands on activity	Approach Meeting Exceeding	Make a name tag	Digital learning
JULY	2.HUMAN BODY	Students will understand how our body part help us, our sense organs and growing older	Collaborative approach, team work, games, quizzes	Worksheet,	Approach Meeting exceeding	Visit to a bio lab	Video on human body
	3.MY FAMILY	Students will understand about the importance of their family.	Interactive and Inquiry based		Approach, relevance, clarity and Neatness.	Draw and paste a picture of your family.	Video on family
AUGUST							
	4.FOOD WE EAT	Student will understand food groups, vegetarian and non-vegetarian, meals, water, golden food habits	Constructivist, Integrative, inquiry based	Worksheet Class test	Approach meeting exceeding	Visit to vegetable garden, picnic spot food of Nagaland	Video on healthy and unhealthy food
	5.CLOTHES WE WEAR	Types of clothes, from cotton fiber to clothes	Constructivist, Integrative, inquiry based	worksheet		Demonstration.	Video on fiber and fabrics

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SEPTEMBER	6. we need shelter	Students will understand kinds of houses, people who make our house	Constructivist, integrative, inquiry based	Worksheet Class test	Approach Meeting Exceeding	Draw different type of houses.	Video on KINDS OF HOUSES
	7. keeping healthy	Importance of Food for health	Constructivist, integrative, inquiry based	Worksheet	Approach Meeting Exceeding	Discussion based on values and life skills	Video on healthy habits
	8. Safety and first aid	Students will understand about safety on road, school, vehicle	Constructivist, collaborative, Integrative	Hands on activity	Relevance to topic, sequence, oral presentation	Prepare a poster on road safety. Find out about different types of road- safety signs and include them in your poster	Video on traffic rules
OCTOBER							
	9. Know your manners	Students will understand that manners make a good impression.	Constructivist Integrative approach	Puzzles worksheet	Relevance to topic, sequence, oral presentation	Role play	
	11. Neighborhood	Students will understand about neighbor and quality of good neighbor.	Constructivist Integrative approach	Puzzle worksheet	Approach meeting Exceeding	drawing	Digital learning
NOVEMBER	12. We need them	Students will learn about people who help us, people who care for us, and people who entertain us.	Constructivist integrative	Worksheet	Approach meeting Exceeding	Draw a picture people who help you	

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NOVEMBER	13.Our festivals	Students will learn about national festivals and harvest festivals.	1.Constructive, 2.Integrative approach. 3. Storytelling	Worksheet home assignment	Concept Chart, Group discussion	Drawing and pictures Related to festival.	Videos on festivals
	14 Travel and communicate	Types of communication and students will learn about travelling.	Constructivist integrative approach		Draw your own journey	Telephone game	Video travelling, world and country
DECEMBER							
	15.Directions and time	Students will understand about direction, time (hours, minutes and seconds, years, months ,weeks)	Constructivist integrative	demonstration	Approach Meeting Exceeding	Story based on direction and time Clock craft	Video based on topic
	16.Weathers and seasons	Students will understand about weather and seasons (summer, winter And spring).	Constructive, Integrative approach			Draw and colour different types of seasons	Video
	17. The world of plants	Students will understand about the use of plants.	Constructive, Integrative approach			Nature walk, visit to a garden	Video on plants
JANUARY 26	18. Plants are useful	Students will understand about plants how they are useful for us.		Worksheets, Activities	Relevant concepts, neatness, leadership skills.		Video
	19. The world of animals	Students will learn about the world of animals.	1.Constructive, 2.Integrative approach. 3.Storytelling	Concept Chart, Group discussion	Thoughts, Sequence	Prepare a chart showing different types of animals	Video

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	20. Animals are useful	Students will learn about how animals are useful for us.	Constructive, Inquiry based				Video on animals
FEBRUARY 26	21. THE WORLD AROUND US.	Students will understand about the earth, The Moon and The Planets	Constructive Inquiry based		performance content, coordination, concept	Diagram	Video
	22. AIR	Students will learn about AIR.	Constructive, inquiry based reflective		content, vocabulary, relevance concept	Balloon games	Video
	23.WATER	Students will learn about WATER.	Constructive, inquiry based ,reflective		worksheet	Group activity	Video



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Class III

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	1. Living and non-living things	Living and non-living things, natural and man-made things, Characteristics of living things, differences between living and non-living things.	Constructive approach, Collaborative approach Storytelling	Class test, Group Discussion worksheet	Relevant concepts, neatness, and leadership skills.	Write and draw two examples of non-living things and living things from our surroundings Flash card game	Video
	2. Parts of plants	Parts of plant, Root system, Shoot system, Functions of different parts, germination of seed	Collaborative, inquiry-based, integrative approach story telling	Concept chart , art G. D. worksheet	involvement, content, sequence, creativity, presentation, neatness	Make a plant by using some real parts of plants	Video
JULY	3. Birds	Body parts of a Bird, how to birds fly? Food habits of Birds, Nest of Birds.	1. Constructive, Integrative approach. 2. Storytelling	Concept chart, art ,G.D .worksheet	relevance to topic, neatness, content	Birds of the feather with song and dance (movements ,sounds ,poems)	Video

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	4.Human body: A living wonder	Human body, Organ systems of human body(Skeletal System, Muscular System, Digestive System, Circulatory System, Respiratory System, Excretory System, Nervous System, Reproductive System Staying Fit and Healthy	1. Constructive 2. Integrative approach. 3. Storytelling	Case study, Flow- chart	Thoughts, Sequence	Model on digestive system Role play on different organ system	Video
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	FIRST PERIODIC ASSESSMENT						
AUGUST	5.Food and feeding habits of animals	Eating Habits of Animals, How Do Animals Feed? , Special Feeding Habits of Some Animals, Food Chain, Taking Care of Animals.	1. Collaborative, Integrative approach. 2. Storytelling	Concept map. G. D. worksheet	Q/A, Coordination presentation expressions	Paste pictures of different animals on chart paper Model on animal feast who eats what?	Video
SEPTEMBER	6.Housing and clothing	Good and Clean House How to keep house clean, Natural Fibres, Man- Made Fibres, Clothes and Seasons.	1. Constructive, inquiry based, collaborative. 2. Storytelling	Relevance to topic, Correct identification worksheet	Thoughts, Sequence	Design a home of your choice. Design a costume for your paper doll/pup pet	Video

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	7.Safety and first aid	Safety on the road, Safety at Home, Safety at School, First Aid.	1.Constructive, integrative, inquiry based. 2. Storytelling	Surveys, art, concept map. Worksheet	relevance to topic, sequence, oral presentation	Prepare a poster on road safety. Find out about different types of road- safety signs and include them in your Poster Role play on first aid	Video
	REVISION FOR MIDTERM ASSESSMENT						
OCTOBER	MID TERM ASSESSMENT						
	8.Soil: A natural wonder	Formation of Soil, Types of Soil, Components of Soil, Uses of Soil, Taking Care of Soil.	1.Constructive, collaborative, integrative. 2. Storytelling	Case study, art, puzzles, worksheet.	Approach, relevance clarity, and neatness.	Make clay toys. Soil texture art	Video
NOVEMBER	9. Light, sound, and force	Light, Shadow, features of a shadow, Sound, Production and Types of Sounds, Force.	1. Constructive, 2.collaborative, 3.inquiry-based. 4. Storytelling	Inquiry-based worksheet.	content, neatness, sequence	Observe the change in the size of the shadow Game-based (relay race, tug of war and on shadow)	Video
	10.Air,water and weather	Air, What does Air Contain? Use of Air, Water, Water Cycle, Weather, Changes in Weather, Seasons	1.Constructive, inquiry-based, reflective. Storytelling	Concept map, sketch, worksheet.	Performance, content, coordination.	Observe the change of state of Water Model of the water cycle.	Video

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DECEMBER	SECOND PERIODIC ASSESSMENT						
	11. Sun, moon and stars	The Sun, The Stars, The Planets, The Moon.	1. Constructive, inquiry based. 2. Storytelling	G.D., class test, worksheet.	relevance to topic, neatness, content	Role play and model making on solar system	Video
JANUARY 26	12. The earth	The Earth, How was the Earth formed? Shape of the Earth, Movements of the Earth, Revolution.	1. Constructive, inquiry-based. 2. Storytelling	Constructive inquiry-based	Performance content coordination	Collect pics of two Indian space women. Paste them and write two lines about Them. Earth game "land and water"	Video
FEB 26	REVISION FOR ANNUAL ASSESSMENT						
MARCH 26	ANNUAL ASSESSMENT						

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CLASS-IV

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	1.Plants: The Producers	Leaf, Photosynthesis, Storage if food in plants, Interdependence of Plants and Animals, Balance of Nature.	1. Constructive approach, Collaborative approach. 2. Storytelling	Worksheets, Activities	Relevant concepts, neatness, and leadership skills.	Draw a well-labeled diagram of a leaf and colour it green. Make a herbarium of different types of leaves	Video
	2. Adaptations in Plants	Adaptations in Plants, Plants based on Habitat.	1.Collaborative, inquiry-based, integrative approach 2. storytelling	Class test, Group Discussion Worksheet.	involvement, content, sequence, creativity, presentation, neatness	Draw Christmas tree on a drawing sheet. Colour it nicely. Write two lines about this plant. Flash card game	Video
JULY	3.Reproduction in Animals	Reproduction, Animals that Lay Eggs, Animals that Give Birth.	1. Constructive, Integrative approach. 2. Storytelling	Concept chart ,drawing, G. D. worksheet	relevance to topic, neatness, content	Model on life cycles Eg. frog ,butterfly	Video
	4.Adaptations in Animals	Adaptations in Animals, Adaptations for food, protection and habitat. Endangered Animals.	1. Constructive, Integrative approach. 2. Storytelling	Concept Chart, G.D. Worksheet	Thoughts, Sequence	Prepare a chart showing different types of animals and their adaptation. Animal album	Video

AUGUST	FIRST PERIODIC ASSESSMENT						
	5.Food:Our basic Need	Nutrients ,Balanced Diet, Cooking and Preservation of Food.	1. Collaborative 2.Integrative approach. 3. Storytelling	Case study, Flow– Chart worksheet	Q/A Coordination Presentation expression	Collect pictures of different methods of food preservation. Prepare a collage on healthy habits	Video
SEPTEMBER	6.Human teeth and digestive system	Teeth ,Taking care of Teeth, Microbes Digestive System.	1. Constructive, 2. Inquiry based, 3. Collaborative. 4. Storytelling	Worksheet, G. D. Concept map	Thoughts, Sequence	Prepare a poster on healthy eating habits and paste it on the wall of your dining room. Role play on digestive system	Video
	7.Safety First	Safety at Home, Safety at School, Safety on Road, First Aid.	1. Constructive 2. integrative 3. inquiry 4. Storytelling	Surveys, art, and Concept Map. worksheet	Relevance to topic, sequence, oral presentation	Make a poster on various safety rules, Safety superstar show	Video
OCTOBER	MID TERM EXAMINATION						

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	8. Clothes	Clothes, Types of Clothes, Making of Clothes, Care of Clothes.	1. Constructive, 2. collaborative, 3. inquiry-based. 4. Storytelling	Case Study , Art, Puzzles, Worksheet	Approach, relevance, clarity and neatness	Design clothes for your doll/ puppet by using different fabric	Video
NOVEMBER	9. Solids, Liquids, and Gases	States of Matter, Change of States, Solution.	1. Constructive, 2. integrative 3. inquiry 4. Storytelling	Concept map, Chart, MCQ worksheet	content, neatness, sequence	Make a chocolate drink for yourself. An artistic journey –by using foil paper, water color and cotton to differentiate states of matter	Video
	10. Force, Work and Energy	Force, Types of Forces, Work, Simple Machines, Energy, Sources of Energy.	1. Constructive, 2. inquiry-based 3. Reflective. 2. 4. Storytelling	Activities: think-pair-share, Concept map, MCQ.	performance content, coordination	Make a paper windmill using coloured papers, glue, and stick Games based on tug of war, relay race	Video
DECEMBER	SECOND PERIODIC ASSESSMENT						
	11. Air, Water and Weather	Air ,Land Breeze and Sea Breeze, Water, Change of States, Water Cycle, Forms of Precipitation, Purification of Water, Weather, Changes in Weather.	1. Collaborative, Inquired based ,integrative approach 2. storytelling	Concept map, Sketch, Worksheet	performance content, coordination	Model on water cycle and land breeze and sea breeze.	Video

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	12.TheSolar System	The Solar System The Earth, Movements of the Earth.	1. Constructive, inquiry-based, reflective. 2. Storytelling	Group Discussion class test, Worksheet.	relevance to topic, neatness, content	Make a solar System using cardboard and paper. Storytelling and role play on solar system	Video
JANUARY 26	13. Green and Clean Earth	Our Environment, Importance of Trees, Waste Management.	1. Constructive, inquiry-based. 2. Storytelling	Activities, worksheet, G. D.	Performance content, coordination	Make a pen stand from an old jar Slogan and poster making on environment	Video
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MARCH 26	ANNUAL EXAMINATION						

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CLASS-V

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	1. Growing plants.	To know about structure and germination of plant, agriculture and reproduction.	Constructive approach, Collaborative approach	class test, G.D. worksheet	.Devolvement, content, sequence, creativity, presentation, neatness.	1. Grow new plant from a root/stem/seed 2. Sprouting of seeds 3.paste/draw5-5 rabi and kharif crops	Video
	2.Habitat and Adaptation.	Habitat of animals, body covering, feeding habits and migration	Collaborative, inquiry-based ,integrative approach	concept map, art, G.D. worksheet Class test	Relevant concepts include neatness, leadership skills.	1.Wildlife habitat diorama. 2. Students will make an animal album	video
JULY	3.Human Skeleton system.	Bones and different types of joints, muscles and importance of fitness.	Constructive, Integrative approach.	Case study, Flow chart Worksheet Class test.	Thoughts, Sequence.	Mode of human skeleton Or build your own skeleton buddy	Video
	4. Human nervous system	Importance of the Nervous system and sense organs.	Constructive, Integrative approach.	Worksheet, G. D., concept map, roleplay on sense organs.	Q/A, Coordination, presentation, and expression.	Make 3 d model of the human brain Role play on different types of nerves and on reflex action	Videos

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	FIRST PERIODIC ASSESSMENT						
AUGUST	5. Food and health.	Nutrients, balanced diet, deficiency and communicable diseases.	Collaborative, Integrative approach.	cooperative learning, worksheet, class test	Relevance to topic, correct identification .	Model on the food pyramid. Make your healthy food salad Yoga with food-themed poses	videos
	6. Safety and first aid.	Safety rules, first aid.	1. Constructive, inquiry-based, collaborative	2. Surveys, art, concept map. Worksheet class test	relevant topic, sequence, oral presentation	make a poster on important rods signs Prepare a first aid box Safety super star show	Module on safety rules.
SEPTEMBER	7. soil	Soil profile, erosion and its conservation.	1. Constructive, integrative, inquiry-based	1. Case study, art, puzzles, worksheet.	Approach, Relevance, clarity and neatness.	Draw a picture of soil profile. Soil texture art	Videos
	MID TERM EXAMINATION						
OCTOBER	8. Rocks and minerals.	Types of rocks, minerals and its uses.	Constructive, Collaborative, integrative.	Concept map, chart, MCQ. Worksheet Class test	Sequence, relevance, content, presentation.	Draw pictures of some monuments of our country such as the Taj Mahal, Jama Masjid, etc. Find out rocks they are made of. Create 3D landscape model	Rocks and minerals.

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NOVEMBER	9. Force, energy and simple machines.	Forces, effects and types of forces and simple machines.	Constructive, collaborative, inquiry-based.	Activities: think-pair-share, concept map, MCQ.	Content, neatness, sequence.	Make a model of the layers of the atmosphere by using colorful paper	Videos on water and air.
	10. Air and water.	Uses of air and water its composition, and properties.	Constructive, inquiry-based, Reflective.	Concept map, sketch, worksheet.	Content, vocab, relevance	Make a water sprinkler Create a simple machine model	
DECEMBER	SECOND PERIODIC ASSESSMENT						
	11.Natural Disasters	Earthquake , effects of earthquake, cyclone and Tsunamis, floods and, droughts	Constructive, inquiry based	Activities, Think pair and share, worksheet.	Relevance To topic, neatness, Content.	Prepare a tabular chart about some Precaution need To be taken During different Natural disasters College making on natural disaster	Videos on Natural Disasters
	12.The Earth, the Sun and the moon	Internal structure of earth, Moon and phases, eclipse	Constructive , inquiry-based	Class test, Group Discussion Worksheet.	Performance, content, Coordination.	Draw and colour The diagram of Solar eclipse And lunar eclipse. Role play on the movements of earth	Videos on The earth, the Sun and the moon
JAN 26	13.Our environment	Pollution, greenhouse Effect and gases, global warming	Constructive, Inquiry-based.	Activities, Worksheet G.D	Sequence, relevance to topic, Performance.	Make a poster on" Say no to Plastic "and Paste it in your Note book. Environment song and dance	Videos of Our environment

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CLASS-VI

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	1.The Wonderful World of Science	Understanding that science is a way of thinking, exploring the natural world.	Collaborative, integrative, constructivist, inquiry based.	Concept map, activities.	Content, neatness, presentation.	Earth day celebration-role play.	Videos.
	2 Diversity in living world.	Explore the vast variety of life forms on earth, classification of living organisms, Features of Plants and their types herbs, shrubs and trees.	Collaborative, integrative, constructivist, Inquiry based.	Concept map, art, worksheets, activities	Creativity, presentation, content, and neatness.	Paste the pics of types of plants based on their height, types of leaf venation and roots	PPT on different types of plants and animals found in India
JULY	3. Mindful Eating :A path to a Healthy Body	Understanding food components, balanced diet and recognizing the consequences of nutrient deficient diet.	Constructivist, collaborative, integrated.	Concept map, activities, diagrams, mcq. Chart.	Creativity, performance, and neatness.	Mindful plate with clay	Videos
	4.Exploring Magnets	Magnetic materials, magnetic poles and explore the concept of attraction and repulsion.	Constructivist, inquiry based, collaborative.	Activities, Class test.	Performance, content, sequence.	Puppet Show by using small magnets	

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	FIRST PERIODIC ASSESSMENT						
AUGUST	5.Measurement of Length and Motion	Measuring length using standard units and instruments and understand types of motions.	Constructivist, collaborative, integrative and inquiry based.	Activity, concept map, art, projects.	Neatness, content, presentation, expression, dialogues	Project :Types of Motion	Videos
SEPTEMBER	6. Materials Around Us	Classify materials based on their characteristics and develop a relationship between material properties.	Collaborative, inquiry-based.	Group Discussion, MCQ,	Lab Activities, concept mapping.		
	9.Methods of Separation	Mixtures, their types, importance of separation as well as new techniques in everyday life.	Constructivist, Collaborative, integrative, inquiry based.	Home assignment, role play, portfolio.	Presentation, content. expression, Dialogues.	Stage play presenting different methods of separation on "Bharat Ki Yatra" of Madhya Pradesh and Manipur.	videos
	MIDTERM EXAMINATION						
OCTOBER	7. Temperature and its Measurement.	Distinguish between hot and cold, temperature scales, use of clinical and lab thermometer.	Constructive, collaborative inquiry, integrative.	Case study, Mcq, activities, worksheet.	Presentation, neatness analysis.	Working homemade Thermometer.	videos
NOVEMBER	10.Living Creatures: Exploring their characteristics	Recognizing common characteristics like growth, reproduction, understanding different life cycles and exploring how organisms adapt to their habitat.	Constructivist, integrative, inquiry-based, collaborative.	Activities, model, concept map.	Content, neatness, correct formation. thoughts, analysis.	3D Model of life cycle of seed/ draw life cycle of frog, mosquito.	Videos

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	8.A Journey through states of water	Focus on understanding different states of water, process of melting, freezing etc.	Constructive, collaborative, inquiry based, integrative.	Lab activity, team work. .class test.	Presentation, analysis Coordination.	Working model of water cycle.	Videos
DECEMBER	SECOND PERIODIC ASSESSMENT						
	11. Nature's Treasure	Learn types of resources, their uses and the impact of human activities.	Constructive, collaborative, integrative, inquiry-based.	Group discussion activity, case study.	Presentation, thoughts, and neatness.	Mineral Kit and Make Jewelry with stones of Nagaland.	Videos
JAN26	12.Beyond Earth	Understanding of constellation, celestial bodies and space exploration.	Constructivist, collaborative, inquiry-based, integrative.	Concept map, case study, activity.	Creativity, content, performance.	Make a Constellation Projector, make an embroidery of the constellation.	videos
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MAR 26	ANNUAL EXAMINATION						

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CLASS-VII

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	1. The ever-evolving world of science.	Focus on developing a scientific attitude and understanding of the scientific process.	1. Constructive, 2 Collaborative, 3 inquiry-based..	MCQ, survey, analysis.	Presentation, concept, creativity.	1. Earth day activity- poster making on the theme Our Planet our power.	Videos
	10. Life processes in plants.	To understand photosynthesis, recognizing the role of chlorophyll and differentiate between autotrophic and heterotrophic nutrition.	2. Collaborative, constructivist, integrative.	2. Concept making, field trip, lab activity.	2. Relevant concept, creativity Presentation	Develop a bottle garden by planting jade, spider plant.	Video on the mode of nutrition.
JULY	9. Life processes in animals.	Learn about essential processes like digestion, respiration, circulation and excretion.	Inquiry-based, collaborative, constructive.	Diagrams, teamwork, concept mapping Worksheets.	Presentation, neatness, Content.	Draw digestive system card/ working model of respiration.	Module on digestive system.
AUGUST	FIRST PERIODIC ASSESSMENT						
	2. Exploring substances: Acidic, basic and neutral.	Identify substances with indicators, Properties of acids, bases, neutralization reaction and their uses.	Constructive, collaborative, integrative, inquiry-based.	Lab activity. Worksheets.	Approach, performance, Neatness. Content.	Create rangoli using acidic or basic substances and natural indicators/ food chart of acidic basic substances with diagram.	Module on lichen and hydrangea.

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SEPTEMBER	3. Electricity: circuits and their components.	Differentiate between static charges and electric current, understand the concept of an electric circuit, its components and construction.	Constructive, integrative .collaborative, inquiry based.	Class test Case study, Q/A.	Concept map, research, creativity.	Make a circuit to show insulator, conductor by lightning a bulb/ Electric multiple assessment project.	Videos on power house generation.
	5. Changes around us- Physical and chemical.	Distinguish between physical and chemical changes, reversible and irreversible changes and their examples in everyday life.	Inquiry-based, collaborative, constructive, integrative.	Lab activity, g.d., concept map.	Concept, creativity, Performance.	Visible message write on paper with lemon juice by warming it with candle./ Folding paper to make different origami.	Videos on landslide and erosion in Manipur.
OCTOBER	MID TERM EXAMINATION						
	4. The world of metals and non-metals.	Learn to distinguish between these, identify their physical properties and understand how they react with other substances.	Constructive, integrative, inquiry based and collaborative.	Lab activity Case study, survey.	Approach, performance, Content, neatness.	Make collage on different metal art styles like dhokra, barware etc. of M.P. and Nagaland.	Videos to show states where gold, aluminum, iron found.

NOVEMBER	6. Adolescence: A stage of growth and change.	Understand changes in body, role of hormones in it and its types along with personal hygiene.	Inquiry-based, collaborative, constructive, integrative.	Class test, case study, g.d., diagrams.	Content, analysis.	Write a rule book how to keep personal hygiene and good health.	Module on child marriage.
	8. Measurement of time and motion.	Students learn to measure time, understand different types of motion, and calculate speed.	Inquiry based, collaborative, constructive, integrative.	Model, worksheets.	Content, Creativity, performance, accuracy, time Management.	Working model on oscillation and periodic motion.	Videos on type of motions.
DECEMBER	SECOND PERIODIC ASSESSMENT						
	7. Heat transfer in nature.	Focus on heat transfer, its modes, and the role of different materials in this process.	Inquiry based, collaborative, constructive, and integrative.	Lab activity	Approach, performance, accuracy.	Make working model on land breeze and sea breeze/ spinning of paper by burning candle.	Videos on mode heat transfer.
JANUARY 26	11. Light: Shadows and reflections.	Understanding that light travels in a straight line, the concepts of reflection and refraction, and the different types of images formed by mirrors and lenses.	Inquiry-based, collaborative, constructive, integrative.	Field trips (forest trip), Writing assignment.	Content, clarity of thoughts, vocabulary, presentation.	Make 3d model on periscope, pinhole and kaleidoscope. / play shadow puppetry show.	Module to show reflection of light, types of objects.

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FEB 26	12. Earth, Moon and the sun.	The Earth's rotation and revolution cause the moon phases, the causes of solar and lunar eclipse.	Constructive, collaborative, integrative, inquiry-based, reflective.	Worksheets, survey, teamwork, case study.	Content, sequence, creativity, presentation.	Role play on the revolution and rotation of earth and model of solar and lunar eclipse.	Video on star trails, observatory.
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CLASS-VIII

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	Chapter-1 Crop production and management	Basic Terminology, Crops, Types of crops, Agriculture practices, Agricultural implements, manures and fertilizers, Irrigation, crop protection, Animal Husbandry.	Constructive approach, collaborative approach, reflective approach, storytelling.	Class discussion, oral test, Question and answer, home assignment, worksheet	Sequencing presentation, time management	Observation and record the stages of the seed germination in various seeds.	PPT of agriculture practices.
	Chapter-3 Coal and petroleum	Basic introduction, Types of natural resources, Fossil fuels, Destructive distillation, Energy And Environment	Constructive approach, reflective approach, Integrative approach, story telling	Classroom discussion ,oral test ,home assignment worksheet	Neatness, creativity, ,presentation	Paste/draw pictures of petroleum extract. Model of solar cell and windmill	Power point presentation-renewable sources of energy.
JULY	Chapter-2 Microorganism: Friend and foe	Introduction of Micro-organisms and microbiology, Different types of Micro-organisms. Useful and Harmful Micro-organisms, avoiding spreading of Micro-organisms, Conditions that promote Microorganisms	Constructive approach, collaborative approach, reflective approach, Integrative approach, storytelling	Class room discussion, worksheet lab activity: (Observation and study of bread mould slide)	Content, sequence, creativity, presentation	Draw figures of various microorganism Model of Nitrogen Cycle	Videos on classification of microorganism ; Useful microorganism .

AUGUST	FIRST PERIODIC ASSESSMENT						
	Chapter-4 Combustion and flame	Combustion: types of combustion, Flame: structure of flame, Fuels ,fuel efficiency ,harmfulness of burning fuel	Constructive, integrative, story telling	Class discussion, oral test , home assignment, worksheet	Content, sequence, creativity, presentati on	3D charts of flame	Video on different combustible material.
	Chapter – 5 Conservatio n of plant and animal	Introduction of Ecosystem, Forest and its Conservation, Wildlife and its Conservation, Wildlife species and its types, Red data book, Migration,	Constructive approach, inquiry-based approach,	Class discussion , oral test , home assignment, worksheet	Time management relevance to the topic, presentation	Collage and figures to make charts.	Video on different National parks and sanctuaries.
SEPTEMBER	Chapter-8 Force and Pressure.	Force and types of force, exploring force, effects of force, pressure, effects of pressure	Constructive. Integrative, storytelling	Classroom discussion, home assignment, worksheet	Time management, relevance to the topic	Model on air pressure	Showing module on force and pressure
	Chapter 9 Friction	Introduction of friction, causes, advantages and disadvantages of friction, increasing and reducing friction	Constructive approach, inquiry- based approach, reflective approach, Integrative approach	Class discussion, oral test, home assignment, worksheet	Content, sequence, conceptual presentation	Working model of friction	Showing module on friction
	MID TERM EXAMINATION						

OCTOBER	Chapter – 11 Chemical effect of electric current	Chemical effect of electric current for different solutions, electrolytes, electrolysis	Constructive, Integrative,	Lab activity, classroom discussion, worksheet	Time management performance, Conceptual presentation	Making complete circuit. Electroplating of iron spoon.	Module on electrolysis process,
NOVEMBER	Chapter-6 Reproduction in animals	Reproduction, Terminology Involved in male and female reproductive system, Fertilization in Humans, Sex Determination, Metamorphosis	Constructive, integrative, storytelling	Classroom discussion, worksheet	Content, sequence, creativity, presentation	Diagrams on methods of asexual reproduction	Modules on sex determination of babies.
	Chapter–12 Some natural phenomena	Phenomena of nature-lightening: types of charges and their interaction, transfer of charge , safety methods earthquake: causes and effect ,protection against Earthquake	Constructive approach, collaborative approach, reflective approach	Classroom discussion, oral test, worksheet	Content, sequence, creativity, presentation	Model of core of earth. Model of earthquake.	Videos on natural disaster- earthquake and tsunami.
DECEMBER	SECOND PERIODIC ASSESSMENT						
	Chapter – 7 Reaching the age of adolescence	Different stages of internal and external changes in human beings	Constructive approach, collaborative approach, reflective approach	Class room discussion, worksheet	Content, sequence, creativity, presentation	Model and 3D charts on metamorphosis (frog/ butterfly)	Videos on position and function of different endocrine gland.

JANUARY 26	Chapter-10 Sound	Basic introduction of sound, production, and propagation of sound, characteristics Of sound, human ear	Constructive, integrative	Drawing a diagram of the human ear, worksheet	Presentation, creativity	Models of different musical instruments-ektara, Tabla, Dhol etc.	Video on the structure and function of human ear.
	Chapter-13 Light	Impact and utilization of light, law of reflection and refraction	Constructive, integrative, storytelling, Lab activity.	Making of ray diagrams, worksheet	Accuracy, Critical thinking, creativity, presentation	3D chart or model on the structure of human eye Model of periscope, Kaleidoscope Activity on splitting of light.	Videos on multiple image formation.

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CLASS-IX-SCIENCE

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	Chapter 5 – The fundamental unit of life (Bio)	Discovery of cell, Cellular Composition in different organisms, shape and size of cells, Prokaryotic and eukaryotic cells, plasma membrane, transport Across the membrane, cell wall, Nucleus, cytoplasm	Constructivist , Inquiry based	Classroom discussions, question answer, assignment	Content, neatness, completion, time management	Make 3d model of plant /animal/ bacterial cell or any cell organelle	
	Chapter 7 – Motion (Phy)	Definition of motion, Relative motion, Definition and comparison of distance and displacement, speed and velocity, acceleration, uniform and non-	Constructivist , Reflective, integrative, inquiry based	Classroom discussion, Drawing and understanding graphs, Flip classroom	Content, neatness, completion, time management		videos
	Chapter 1 – Matter in our surroundings (Chem)	Matter, its characteristics and its states, differences between them, interconversion of states of matter and terms related to them, Effect of change of temperature and pressure on the three states of matter	Constructivist, Inquiry based, Reflective	Brainstorming, Classroom discussion, Class test, Demonstration, Flowchart, Group discussion Pen and Paper test	Content ,Time Management Fluency	Demonstration of effect of diffusion in our daily life	

JULY	Chapter5–The fundamental unit of life (continue) (Bio)	Endoplasmic Reticulum, Golgi Apparatus, Lysosomes, Plastids, Vacuoles, Mitosis and Meiosis cell division	Constructivist , Inquiry based, Reflective	Question – Answer session, Sketch, Home assignment	Content, neatness, completion, time management Approach Sequence, time management presentation		Video of cell structure
	Chapter-7Motion (contd..) (Phy)	uniform motion, uniform & non-acceleration, Distance- graphs, Equation of motion, Numerical based on three equations of motion, Uniform Circular motion, Exercises	Constructivist , Reflective, Integrative Inquiry-based	Drawing graphs, problems based numerical	Relevance to the topic: Neatness Accuracy	Make graph of different types of motion	
	Chapter -8 Force and laws of motion	Force, Balanced and unbalanced force, Galileo's experiment	Constructivist ,Reflective, Integrative, Inquiry-based	Question answer assignment			Video Module (force and laws)
	Chapter 1 – Matter in our surrounding (contd..) (Chem)	latent heat, evaporation, factors affecting it, and its cooling effect	Constructivist Inquiry-based, Integrative, Inductive	Class test, Demonstration on Flowchart Group discussion Pen and Paper test	Concept Accuracy Vocabulary Observation Critical thinking Presentation Collaboration Time Management		PPT (States of matters) Videos of inter particle forces
	FIRST PERIODIC ASSESSMENT						

AUGUST	Chapter 6 – Tissues (Bio)	Plant tissues: types (meristematic tissues, permanent tissues), structure	Constructivist, Reflective, Inquiry-based	Classroom discussion, Sketch, Home assignment	Content, neatness, completion, and time management		Animated video on plant cell
	Chapter 8 – Force and Laws of Motion (continue) (Phy)	Newton's applications, Inertia and mass	Constructivist Reflective, Integrative, Inquiry-based	Classroom discussion, activities, assignments problem-based	Content, neatness, Relevance Approach, Accuracy	Demonstration of Newton's law by balloon rocket and table cloths trick	
	Chapter 2 – Is matter around us pure? (Chem)	Pure substances (elements and compounds), mixtures (homogeneous and heterogeneous)	Constructive Inquiry-based Integrative	Laboratory method Classroom discussion Class test	Concept Accuracy Vocabulary Observation Critical Thinking Presentation Time Management	Flowchart of classification of matter,	
SEPTEMBER	Chapter 6 Tissues (contd.) (Bio)	Permanent tissues: simple permanent tissues & complex permanent tissues, Functions of plant tissues, Animal tissues: types	Constructivist, Reflective, Inquiry-based	Classroom discussion, Sketch, Home assignment	Content, neatness, completion, time management	Draw diagram- different types of animal tissue	
	Chapter-8 Force and laws Of motion (contd.) (Phy)	Momentum, Force and acceleration and numerical based on them	Constructivist Inquiry based	Classroom discussions, numerical	Involvement, team management Relevance Approach, Accuracy		Videos on three laws

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	Chapter 9 – Gravitation (Phy)	Gravitation, universal law of gravitation, force of gravitation (gravity), free fall, acceleration due to gravity, mass and weight	Constructivist Inquiry based	Classroom discussions, numerical	Involvement, team management Relevance Approach Accuracy	An experiment to perform concept of gravity	
	Chapter- 2 – Is matter around us pure? (Chem)	Solution, colloids and suspension, concentration of a solution, Physical and chemical changes	Constructivist Inquiry-based, Deductive, Integrative	Problem-based learning, Worksheet, Classroom discussion Pen and Paper test	Relevance Approach Accuracy Content Neatness	Calculate the concentration, solubility of solutions	Module (Solution, colloids and suspension)
OCTOBER	MID TERM EXAMINATION						
	Chapter- 6 Tissues (Bio) Contd.	Animal tissues: epithelial tissue, connective tissues, muscular tissues, nervous tissue, structure and function	Constructivist , Reflective, Inquiry-based	Classroom discussion, Sketch, Home assignment	Content, neatness, completion, time management, content, creativity, presentation		Animated video Module for animal tissue
	Chapter-9 Gravitation (continue) (Phy)	Definitions-Thrust, pressure, Buoyant force, factors on which it depends, Archimedes' principle and its applications	Constructivist , Inquiry based	Classroom discussions, numerical	Relevance Approach Accuracy	Finding the density of given object using spring balance and measuring flask	Module (flotation)

	Chapter 3 – Atoms and Molecules (Chem.)	Laws of chemical combination, Dalton's atomic theory, atoms, their size and symbol, atomic mass, molecules and ions, Writing chemical formulae of common compounds, molecular masses	Constructivist Reflective, Deductive, Integrative	Problem-based learning, home assignments Class test	Relevance Approach Accuracy	Groups create 3D models of molecules using clay, sticks, or balls and label them with chemical formulas.	
NOVEMBER	Chapter-12 Improvement in food resources (Bio)	Plant and animal breeding and selection for quality improvement and management; crop production management	Constructivist , Reflective, Inquiry based	Classroom discussion, Sketch, Home assignment	Content, neatness, completion, time management content, creativity, presentation		Presentation and video on animal husbandry
	Chapter- 10 – Work, Power and Energy (Phy)	Work –negative and positive, energy-types, kinetic energy-definition, derivation of formula, potential energy-definition and formula, law of conservation of energy, Power, average power	Constructivist Inquiry based	Classroom discussion, activities, Problem based learning	Relevance Approach Accuracy	Conservation on mechanical energy	
	Chapter 4 – Structure of the Atom (Chem)	Sub atomic particles (electron, proton and neutron), Thomson, Rutherford and Bohr's model of atom, valency, atomic number and mass number	Constructivist Inquiry based, Inductive	Classroom discussion Reasoning Oral test	Concept Critical thinking		PPT and Module (discovery of sub atomic particles)
	SECOND PERIODIC ASSESSMENT						

	Chapter 12 Improvement in food resources (Bio)	use of fertilizers and manures; protection from pests and diseases; organic farming	Constructivist , Reflective	Sketch, Home assignment	Content, neatness, completion, time management	Comparison Charts on crops variety grown in Nagaland and Manipur	
DECEMBER	Chapter 11– Sound (Phy)	Sound, production and propagation of sound waves- Electromagnetic and mechanical, transverse and longitudinal, characteristics of sound waves, speed of sound in different media, reflection of sound, echo, reverberation, Range of hearing, ultra sound and its applications	Constructivist Inquiry based	Classroom discussion, activities, Problem based learning	Relevance Approach Accuracy	Group built a simple instrument to explain pitch frequency and amplitude	
	Chapter 4 – Structure of the Atom (continue) (Chem)	Different atomic species viz, isotopes, isobars and problems related to them	Constructivist , Inquiry based	Problem-based learning Worksheet Pen and Paper test	Relevance Approach Accuracy Content, neatness, completion, time management		Make a presentation on journey of any one scientist who gave atomic model's
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CLASSX

MONTH	CHAPTER	EXPECTED LEARNING OUTCOMES	PEDAGOGICAL APPROACH (TEACHING METHODS/ STRATEGIES)	ASSESSMENT TOOLS	RUBRICS	ART INTEGRATION	ICT INTEGRATION
APRIL	Chapter 5: Life Processes(Bio)	Nutrition, Modes of Nutrition, Nutrition in plants and human being Respiration in plants and animals	Constructivist, Reflective, Inquiry-based, Integrative	Classroom discussion, question-answer session, Individual test, home assignments Class test Lab activity	Content, neatness, completion, time management sequence, creativity, presentation	3D chart or models on Human heart, Digestive system, Nervous system, and Respiratory system	Modules on life processes (Nutrition, Respiration)
	Chapter9:Light– Reflection and Refraction (Phy)	Propagation of light, reflection, laws of reflection, image formation by spherical mirrors, uses of mirrors. Mirror formula and magnification, sign convention, solving numerical based on mirror formula, Refraction, Laws of refraction, refractive index	Constructivist Reflective integrative Inquiry based	Experiment, ray diagram, classroom discussions, home assignment,	Concept Neatness Accuracy Completion	Ray diagram	Module (Image formation by spherical mirrors)
	Chapter1: Chemical Reactions and Equations (Chem)	Chemical reactions and its identification, Chemical equations and their balancing, all types of chemical reactions and their examples.	Think-Pair-Share Constructivist Inquiry based Demonstration Experimentation	Entry and exit questions Choral response Class test Lab activity	Relevance Accuracy Imagination Concept Promptness Discipline	Chart of elements and ions along with their valency/charge Reactivity series of metals	Module (Types of Chemical Reactions)

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JULY	Chapter 5: Life Processes (continue) (Bio)	Transportation in plants and human being, Excretion in plants and human beings	Constructivist, Integrative Approach Reflective approach	Classroom discussion, Sketch Lab activity Assignment	Content, neatness, completion, time management		Modules on life processes (Transportation, Excretion)
	Chapter 9: Light – Reflection and Refraction (Phy)	Spherical lenses, image formation by lenses, sign convention, lens formula, power of lens	Constructivist Reflective integrative Inquiry based	Experiment, ray diagram, classroom discussion	Concept procedure Neatness Accuracy Completion	Ray diagram	Animated Video on Refraction
	Chapter 2: Acids, Bases and Salts (Chem)	Acids and Bases: definitions, identification using indicators, chemical properties, examples and uses, neutralization, concept of pH scale, importance in everyday life, Preparation and uses of Sodium Hydroxide, bleaching powder, baking soda, Washing soda and Plaster of Paris	Constructivist Inquiry-based Demonstration Experimentation	Brainstorm Activity Class test	Relevance, Coordination Time Management	Chart on different types of indicators	Phet simulation (Acid–Base solutions) Animated Video

FIRST PERIODIC ASSESSMENT							
AUGUST	Chapter 6: Control and Coordination (Bio)	Control and coordination in animals: Nervous system; Voluntary, involuntary reflex action; Tropic movements in plants; Introduction of plant hormones, Chemical coordination (animal hormones)	Constructivist Inquiry based	Classroom discussion, Sketch, flowcharts	Content, neatness, completion, time management	3D Model of human brain	Animated Video
	Chapter 10: The Human Eye and the Colorful World (continue) (Phy)	Refraction of light through a prism, Dispersion, and rainbow formation	Constructive Reflective Integrative Inquiry based	Ray diagram, Demonstration refraction, total internal reflection	Concept Neatness Accuracy Completion	Structure of the eye	
	Chapter 3: Metals and Non-Metals (Chem)	Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds	Constructivist Reflective	Entry and exit questions, Worksheet	Relevance Accuracy Imagination Completion Time Management	Reactivity series	Animated Video
SEPTEMBER	Chapter 7: How Do organisms Reproduce? (Bio)	Asexual and Sexual reproduction in plants and animals, reproductive health need and methods of family planning, Safe sex vs HIV/AIDS, Child bearing and women's health.	Constructivist Inquiry based	Classroom Discussion, Question answer session, assignment Lab activity	Content, neatness, completion, time management,	Diagrams of Modes of sexual reproduction	Animated Video

	Chapter 10: The Human Eye and the Colorful World (continue) (Phy)	Phenomena based on atmospheric refraction and scattering of light	Constructive Reflective Integrative Inquiry based	Demonstration scattering, assignment.	Concept Neatness Completion	Diagrams	Animated Video
	Chapter 11: Electricity (Phy)	Electric current, potential and potential difference, electric circuit, Ohm's law	Constructivist Collaborative	Circuit diagrams, home assignment	Relevance, Leadership skills, Coordination Time Management	Paper circuit (Series & Parallel combination)	Module (Ohm's Law)
	Chapter 3: Metals and non-metals (continue) (Chem)	Basic metallurgical processes; Corrosion and its prevention	Constructivist Reflective	Entry and exit questions, Worksheet Class test	Relevance Accuracy, Imagination Completion Time, Management	the steps of extraction of metals	Module (extraction of metals)
OCTOBER	MID TERM EXAMINATION						
	Chapter Heredity (Bio)	Heredity, contribution, Mendel's Laws of inheritance of traits, sex determination	Constructivist Inquiry-based Integrative	Classroom discussion, Pair work, Problem-based learning, learning across curriculum, assignment	Content, neatness, completion, time management, Approach, sequence, presentation	Chart on Mendel's law	Animated Video
	Chapter 11: Electricity (continue) (Phy)	Ohm's, Resistance, resistivity, affecting resistance, series And parallel combination, Joules law of heating, electric power, Interrelation between P, V, I and R	Constructive Reflective, integrative Inquiry based	Circuit diagrams, experiment	Concept procedure Neatness Accuracy Completion		

	Chapter 12: Magnetic Effects of Electric Current (Phy)	Oersted's experiment, magnetic field, magnetic field lines and their properties, right hand Thumb rule	Constructive Reflective integrative, Inquiry based	Circuit diagrams, activity, and notes	Concept Neatness Completion		Animated Video
	Chapter 4: Carbon and its compounds (Chem)	Covalent bonding, versatile nature of carbon, saturated and Unsaturated hydrocarbons, homologous series, Nomenclature of carbon compounds	Constructive Reflective, Integrative Inquiry based	Worksheet	Concept Neatness Accuracy Time Management	Covalent bonds formation	Module (Carbon compounds)
NOVEMBER	Chapter13: Our Environment (Bio)	Eco-system, Food chain, food-web, trophic levels, 10% law, biological magnification, environmental problems, ozone depletion, waste production and their solutions, biodegradable and non-Biodegradable substances	Constructivist, concept map, inquiry based	Class discussion, , Problem based learning, worksheet,	Content, neatness, completion, time management	Draw a flow chart of food chain and food web	Animated Video
	Chapter 12: Magnetic Effects of Electric Current (continue) (Phy)	Magnetic field due to straight current carrying conductor, circular loop, a solenoid, force acting on a conductor placed in magnetic field, Fleming's left-hand rule, Domestic electric circuit	Constructive Reflective integrative Inquiry based	Circuit diagrams, Classroom discussion	Concept Neatness Accuracy Completion		

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	Chapter 4: Carbon and its compounds (Continue) (Chem)	Chemical properties of carbon compounds , Ethanol and ethanoic acid, soaps and detergents	Constructivist Inquiry-based Experimentation Collaborative Reflective	Question Answer Session Class test Lab activity	Promptness Concept Neatness Completion Time Management	Chart (functional group)	Module (Soaps and detergents)
DECEMBER	PRE BOARD I EXAMINATION						
	REVISION						
JAN 25	PRE BOARD II EXAMINATION						
	FINAL PRACTICAL EXAMINATION						
FEB 25	ANNUAL EXAMINATION						
MAR 25	ANNUAL EXAMINATION						

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