

GATEWAY INTERNATIONAL SCHOOL
SESSION: 2026-27
ANNUAL FLOWCHART

SUBJECT: SCIENCE

CLASS: V

MONTH	UNIT/TOPIC	SUB-TOPIC	ACTIVITIES
APRIL	Unit-1 (Animals)	Characteristics of Reptiles Characteristics of Amphibians Characteristics of Mammals	1) Mystery Animal Challenge: The teacher describes a “mystery animal” without telling its name. Clues are based on characteristics such as: Skin (dry, scaly, moist, furry) Habitat (land, water, both) Reproduction (lays eggs / gives birth) Breathing (lungs/gills) 2) Know Your Animals Identify and write key characteristics of different animal groups on A 4 size sheet/power point presentation.
MAY	Unit-2 (Water)	Water cycle Forms of water Evaporation and factors impacting the rate of Evaporation. Condensation and factors impacting the rate of Condensation. Precipitation and factors impacting the rate of Precipitation.	1) Evaporation Race Experiment: In this activity, students will explore the concept of evaporation by comparing how quickly water evaporates under different conditions. 2) Condensation in a Jar : In this activity, students will observe the process of condensation by creating it inside a beaker or jar. 3) Rain in a Cup: Students create a “cloud” using shaving foam on top of water in a jar. Coloured water is dropped onto the foam until it becomes heavy and falls like rain. This demonstrates how clouds release precipitation when they become saturated. 4) Study of weather report: Students will learn about different elements of weather such as temperature, rainfall, and wind. They will observe and record daily weather and present it like a weather reporter to understand real-life applications of weather reports.

JULY	Unit-3 (Plants)	Seed and its Structure Elements of Germination Vegetative Propagation Soil Erosion and Conservation of Soil	<p>1) Germination Experiment: In this activity, students will observe the process of seed germination by placing seeds (such as beans) on moist cotton in a container.</p> <p>2) Mandala Art with Seeds: Students will create beautiful mandala patterns using different types of seeds to develop creativity, focus, and fine motor skills. This activity also promotes awareness about natural materials and patterns found in nature while enhancing artistic expression.</p> <p>3) Soil Erosion Activity: In this activity, students will observe how soil erosion occurs by pouring water over two trays—one with bare soil and the other covered with grass or leaves.</p> <p>4) Case study on conservation of soil : Sukhomajri Village (Haryana),</p>
AUGUST	Unit -4 (Human Body)	Skeletal system Digestive system Respiratory system Circulatory system	<p>1) Build-a-Skeleton: In this activity, students will assemble a human skeleton using labelled cutouts of different bones.</p> <p>2) Lung Capacity Experiment: In this activity, students will measure their lung capacity by blowing air into a balloon</p> <p>3) Working Model of Human Body: Students will independently create a model of any human body system using different materials, following the given instructions.</p> <p>4) Posture Patrol: Students will observe each other's posture during different activities and remind one another about the importance of maintaining good posture.</p>
SEPTEMBER	Revision for Term -1 Assessment	Revision through worksheets and oral discussion.	
OCTOBER	Unit -1 (States of Matter)	Characteristics of Solid, Liquid, and Gas Physical Change and Chemical Change Reversible Change and Irreversible Change	<p>1) Bond Game: An engaging activity where students act as particles of solids, liquids, and gases to understand intermolecular bonding. Students form groups and demonstrate how particles are arranged and move in each state</p> <p>2) Change Detectives: Students observe different examples (like tearing paper, melting ice, rusting, burning) and identify whether the change is physical or chemical. They discuss the characteristics of each type of change and record their observations.</p> <p>3) Back or Not Back: Through simple activities like melting ice, folding paper, and burning paper (demonstration), students explore reversible and irreversible changes.</p>

NOVEMBER	Unit-2: (Tools and Machines)	Lever Pulley Inclined Plane Wheel and Axle Wedge and Screw	<p>1) Build Your Own Lever: Students create a simple lever using everyday materials like a ruler, pencil (as fulcrum), and small objects as load. They explore how changing the position of the fulcrum affects the effort needed to lift the load.</p> <p>2) Lift with a Pulley: Students create a simple pulley using a rope and a spool or wheel. They try lifting a small object (like a bottle or eraser) and observe how the pulley makes lifting easier by changing the direction of force.</p> <p>3 Slide Down the Inclined Plane: Using a cardboard ramp or book, students roll objects from different heights and angles. They observe how an inclined plane reduces the effort needed to move objects upward.</p> <p>3.Roll It Easy (Wheel and Axle): Students use a toy car or make a simple model with bottle caps and sticks to understand how wheels help objects move easily. They compare pushing an object with and without wheels.</p> <p>4. Cut and Twist (Wedge & Screw): Through teacher demonstration, students observe how a wedge (like a knife) is used to cut and how a screw helps in holding objects together. They discuss how these simple machines make work easier.</p>
DECEMBER	Unit -3 (Natural Resource : Air)	Composition of Air Oxygen , Carbon dioxide and Nitrogen Air pollution -Cause ,Effect and Solution	<p>1) Oxygen in Action: Through an experiment (like a burning candle in a jar), students observe how oxygen supports burning and is essential for life.</p> <p>2) Carbon Dioxide Test: Students blow air through a straw into limewater and observe the change, helping them understand the presence of carbon dioxide in exhaled air.</p> <p>3) Case studies on control of air pollution in India</p>
JANUARY	Unit -3 (Natural Resource :Air) Continued	Renewable and Non Renewable Resource	<p>3) Clean Air Campaign: Students identify causes of air pollution (vehicles, factories, burning waste) and discuss their effects on health and the environment. They then suggest practical solutions and create posters to spread awareness.</p> <p>4) Students will create a model of a solar cooker, windmill, or any other alternative source of energy.</p>
FEBRUARY	Revision for Term -2 Assessment	Revision for Term -2 Assessment	

Subject- Mathematics

MONTH	UNIT/TOPIC	SUB-TOPIC	ACTIVITIES
APRIL	NUMBERS	<ul style="list-style-type: none"> · Place value of 8 and 9-digit numbers · Expanded form of 8 and 9-digit numbers · Reading and writing numbers of 8 and 9-digit numbers · Predecessor and successor of 8 and 9-digit numbers · Comparing and ordering 8 and 9-digit numbers · International Numeration system · Patterns in Numbers · Patterns within patterns · Roman Numbers (till 1000) 	<p>Integration with IT- Make a PPT showing large numbers around us.</p> <p>Hopscotch Number Game (predecessor and successor)</p> <p>Roman Time Traveller- Create clocks using Roman Numerals.</p>
MAY	NUMBER OPERATIONS	<ul style="list-style-type: none"> · Addition of 8 and 9 -digit numbers · Subtraction of 8 and 9 -digit numbers · Multiplication of 8 and 9 -digit numbers · Approximating a product · Division of a five-digit number by a two-digit number · Dividing a 5-digit number by a three-digit number · Estimating products and quotients · BODMAS · Divisibility rules · Associative and distributive property 	<p>Integration with English-</p> <p>Creating real-life word problems using their own sentences for given equations (all number operations)</p> <p>BODMAS card game.</p> <p>“Young Entrepreneurs Expo”</p>
JULY	FRACTIONS	<ul style="list-style-type: none"> · Fractions · Comparing and ordering unlike fractions · Addition, subtraction, multiplication, and division of unlike fractions 	<p>Understanding Fractions with JODO Gyan fractions kit and Jodo blocks</p> <p>Fraction Rangoli</p>
AUGUST	ANGLES	<ul style="list-style-type: none"> · Types of angles · Measuring angles · Estimation of angles · Drawing angles · Interior and exterior angles 	<p>Classroom Activity – Marking the angles of the different objects in the classroom.</p> <p>Human Angle Maker (physical education)</p> <p>Decimal Art- colouring grids</p>

	DECIMALS	<ul style="list-style-type: none"> · Place value of decimal numbers · Reading and writing decimals · Comparing and ordering decimal numbers · Converting fractions into decimals 	
SEPTEMBER		Recap of Term-1 Assessment	
OCTOBER	DECIMAL OPERATIONS PERCENTAGE	<ul style="list-style-type: none"> • Measurement in Decimal numbers • Converting units of measurement in the form of decimals • Operations • Situations Sums • Understanding the meaning of percentage • Representing percentage • Conversion • Situation Sums 	Working Decimal Place Value Chart Healthy plate percentage
NOVEMBER	AREA AND PERIMETER VOLUME	<ul style="list-style-type: none"> • Understanding Perimeter and Area • Usage of the formula of Area and Perimeter • Situation Sums • Introduction of Volume • Usage of the formula of Area and Perimeter • Situation Sums 	Measurement of different objects in the class. Volume Measurement: Water Experiment
DECEMBER	SHAPES AND SYMMETRY	<ul style="list-style-type: none"> • Measuring angles in regular shapes • Nets and properties of prisms • Nets and properties of pyramids • Reflection and rotational symmetry • Degree and order of rotation 	Activity- Rotational Symmetry Art: Creating a Pinwheel Making 3D shapes using nets
JANUARY	DATA HANDLING	<ul style="list-style-type: none"> • Reading and drawing the circle graph • Reading and drawing line graphs 	Circle cutout activity for a pie chart
FEBRUARY		Recap of Term-2 Assessment	

Subject- Social Science

MONTH	UNIT/TOPIC	SUB-TOPIC	ACTIVITIES
APRIL	Unit 1-Water Unit 2-Farming (Introduction will be given)	<input type="checkbox"/> Managing water in Desert <input type="checkbox"/> Managing water on mountains <input type="checkbox"/> Dams and its impact on environment <input type="checkbox"/> Seasons and Farming <input type="checkbox"/> Types of irrigation <input type="checkbox"/> Factors influencing irrigation methods	MapWork <input type="checkbox"/> Students will observe and locate the states on the map marking annual rainfall of India receiving high to very low rainfall. <input type="checkbox"/> Students will observe and locate different dams in India. Activity- "My Water Diary" – 7-day real life tracking activity. Every student will maintain a water diary for 7 days to track <input type="checkbox"/> How much water they use <input type="checkbox"/> Where they use it <input type="checkbox"/> How they can save water
MAY	Unit 2- Farming (to be continued) Unit 3-Forest	<input type="checkbox"/> Farming tool: Then and now <input type="checkbox"/> Different kinds of farms <input type="checkbox"/> What is a Forest? <input type="checkbox"/> Thorn and Shrub Forest <input type="checkbox"/> Coniferous forest Evergreen Forest <input type="checkbox"/> Deciduous forest <input type="checkbox"/> Mangrove forest	MapWork Students will observe and locate the states on the map for marking different forests in India. Activity- "Build your own Farm-to-plate story strip" Students will make a story strip with with 6 steps of farming. Debate : Development v/s Conservation
JULY	Unit 4- From hunting to growing food Unit5-Shelter	<input type="checkbox"/> Learning from Nature: Farming <input type="checkbox"/> Early interactions between Humans and Animals <input type="checkbox"/> Invention of Ard <input type="checkbox"/> Landform and houses <input type="checkbox"/> The Place where I live <input type="checkbox"/> Bring Nature In <input type="checkbox"/> Energy and Environment <input type="checkbox"/> Vernacular Architecture	Discussion Activity- <input type="checkbox"/> Then v/s Now – Comparison chart <input type="checkbox"/> Make your own stone tool (pottery) <input type="checkbox"/> Experiment- Use mud pots for cooling <input type="checkbox"/> Showing cases studies and examples of eco-friendly inventions <input type="checkbox"/> Debate : Adopting eco-friendly techniques v/s technology
AUGUST	Revision for Term -1 Assessment		

OCTOBER	Unit 1-Migration Unit 2-Transport	<ul style="list-style-type: none"> • Moving to place • When Earth shook • Earthquake resistant building • Looking for new beginnings Natural disaster and management • Adjusting to flood • Infrastructure for Transportation • Highways • Different kinds of Roads Connecting India 	<ul style="list-style-type: none"> • Real life connection activity – Has anyone in your family moved? Describe the situation. • Discussion of voluntary and involuntary migration. • Locating a super highway known as Golden Quadrilateral on a political map of India. (Art Integrational Map work)
NOVEMBER	Unit 3- Life and Livelihood Unit 4 – Local Administration	<ul style="list-style-type: none"> • Jalandhar-Sports City of India • Jagannath temple of Puri • Breaking the stereotype • Dignity of labour • My life is my message • Rules All Around Us • Making of Rules • Structure of Municipal Corporation of Delhi • Responsibility of an Individual • Our Waste, Our Responsibility • Arranging Money for Services 	<ul style="list-style-type: none"> • Recreating some local art forms – Mandala, Pottery etc. • Types of industries and employment they provide • Real life problems around local areas(with pictures) amd students suggest whom to contact and what they shall do. • Mock classroom panchayat
DECEMBER	Unit 5-SolarSystem	<ul style="list-style-type: none"> • Mapping the World • Seven Wonders of the World • Continents of the World • Day and Night • Earth's axis and rotation • Solar system • Space explorers 	<ul style="list-style-type: none"> • A rotation of Earth cause Day and Night- Locating India on a Globe and takes a flashlight and focus its light directly on India to explain the process of rotation causing day and night. • Interview – The sun interviews different planets about their unique traits.
JANUARY	Revision for Term-2 Assessment		

Subject- Computer

MONTH	UNIT/TOPIC	SUB-TOPIC	ACTIVITIES
APRIL	Chapter-1 Word Tables the Easy way	Chapter-1 <ul style="list-style-type: none"> ü What is a Table? ü Creating a Table in Word ü Adding data in a Table ü Selecting cells, rows, columns and table ü Editing a table ü Styling a table ü Merging and splitting cells 	Table Challenge Race Shopping bill generator Creating time table using table
MAY	Chapter-2 Word Power Tools Chapter- 9 Creating Apps with MIT app inventor	Chapter-2 <ul style="list-style-type: none"> ü Page Formatting ü Column Formatting ü Borders and shading ü Mail Merge Chapter-9 <ul style="list-style-type: none"> ü What are Apps? ü Features of mobile Apps 	Create a School Invitation Before and after formatting activity
JULY	Chapter- 9 Creating Apps with MIT app inventor	<ul style="list-style-type: none"> ü Types of Mobile Apps ü Categories of Apps ü App Inventor ü Starting MIT App inventor ü Types of UI Components ü Blocks Editor and its Interface ü Creating an App ü Testing your App 	My First Interactive App Presentation on my Favourite app and its Features

AUGUST	<p>Chapter- 3 Slides that Impress</p> <p>Chapter- 4 Adding Life to slides</p>	<p>Chapter- 3</p> <ul style="list-style-type: none"> ü Templates ü Themes ü Inserting Text box ü Inserting Graphical Objects in a slide ü Grouping and ungrouping Objects ü Different presentation views <p>Chapter-4</p> <ul style="list-style-type: none"> ü Inserting audio ü Inserting Video ü Tables in PowerPoint ü Working with slide Master 	<p>Creating My Dream School in Canva</p> <p>Creating news report presentation for assemblies</p> <p>PPT for angels and decimals around me.</p>
SEPTEMBER	Revision for Term-1 Assessment		
OCTOBER	Chapter- 8 Scratch Meets AI	<ul style="list-style-type: none"> ü Working with Multiple Sprites ü Broadcast and Receive Blocks ü Variables ü Creating a Game in Scratch ü Using the AI features of Scratch 	Create a Smart Catch Game
NOVEMBER	Chapter-5 Understanding Excel	<p>Chapter- 5</p> <ul style="list-style-type: none"> ü Introduction to Excel ü Starting Excel ü Components of Excel ü Changing the Active Cell 	<p>Meet My Smart Table – Excel Adventure</p> <p>Mess Menu Survey (most liked/ least liked)</p> <p>Interaction session with people who uses excel in schools.</p>

		<ul style="list-style-type: none"> ü Creating a New Workbook ü Data Types in Excel ü Entering Data in a worksheet ü Saving and Closing a Workbook ü Opening a Saved Workbook 	
DECEMBER	<p>Chapter- 7 Smart with Data</p> <p>Chapter- 10 AI Industry 5.0: Smart Robots</p>	<p>Chapter- 7</p> <ul style="list-style-type: none"> ü Collecting Data ü Sorting Data ü Trends and Anomalies in Data ü Data for Decisions <p>Chapter- 10</p> <ul style="list-style-type: none"> ü Introduction to AI Industry 5.0 ü Need for AI Industry 5.0 ü Basic Components of Robots ü Future Possibilities 	<p>Analyzing case studies (where data helped in decisions)</p> <p>Interaction session with Admin Staff who tells how data helps in school</p> <p>Draw Your Future Robot</p>
JANUARY	Chapter- 6 Exploring the Online World	<ul style="list-style-type: none"> ü Services on the Internet ü Searching for Information ü Communication ü Social Networking ü Blogs ü E- Banking ü Cloud Storage 	<p>My First Blog</p> <p>Write a safe email</p> <p>About cyber safety</p>
FEBRUARY	Revision for Term -II Assessment		