Class IX 2025 – 26 Book List

English	 Beehive - Textbook in English for Class IX (NCERT) Moments - Supplementary Reader in English for Class IX (NCERT) 					
Hindi	 क्षितिज भाग – 1 कृतिका भाग 1 व्याकरण सुबोध 					
Science	Science Textbook for Class IX					
Mathematics	Mathematics Textbook for Class IX (NCERT)					
Social science	 Democratic Politics – I Textbook in Political Science for Class IX India and the Contemporary World – I Text book in History for Class IX Economics Social Science Textbook for Class IX Contemporary India – I Textbook in Geography for Class IX 					
Artificial Intelligence	Artificial Intelligence (417) by Kips Publications					
Art & craft	Millennium's ABCD- anybody can draw					

ENGLISH

Month & Periods	Literature	Grammar	Writing	Art Integrated Activities
April (30)	<u>Beehive :</u> The Fun They Had The Road Not Taken <u>Moments</u> : The Lost Child	Tenses Gap filling	Diary Entry	Write a diary entry from the perspective of a character from the chapters done (Add illustrations, emojis or doodles to depict emotions)
May (24)	<u>Beehive :</u> The Sound of Music <u>Moments</u> : The Adventures of Toto	Determiners	Describing a Person	Quirky Questionnaire: Make a questionnaire consisting of five multiple choice questions each from any three chapters
July (26)	<u>Beehive :</u> The Little Girl Truly Beautiful Mind Wind	Reported Speech	Letter to Editor	The poem Wind teaches a life lesson. Think about any other message taught by nature and speak about it. (Speaking activity)
August (30)	<u>Beehive :</u> Snake and the Mirror Rain on the Roof <u>Moments :</u> Iswaran the Storyteller	Sub. Verb agreement	Story Writing	Create a Mind Map (any one chapter) consisting of the following points: Description of the chapter's protagonist, a quote related to the chapter, central idea, new words, summary points and relevant pictures.
September (15)	<u>Beehive :</u> The Lake Isle of Innisfree Moments : In the Kingdom of Fools	Integrated Grammar		Listening Activity Reading Comprehension Revision worksheet

October (24)	Beehive : My Childhood A Legend of the Northland Moments : The Happy Prince	Modals		Poem Illustration - Create an illustrated poster depicting the theme, imagery or emotions of any poem.
November (30)	Beehive : Reach for the Top		Describing a Place	Prepare a flow chart on any one chapter highlighting the important events of any chapter. Also add related pictures.
December (30)	Beehive : Kathmandu No Men are Foreign Moments : A House is not a Home	Integrated Grammar	Describing an Event	Prepare a speech on the person who inspires you the most (Speaking activity)
January (24)	<u>Beehive :</u> On Killing a Tree If I were You <u>Moments :</u> The Beggar			Listening Activity Reading Comprehension
February (14)	Beehive : A Slumber did my Spirit Seal Revision	Revision	Revision	Revision worksheet

Learning Objectives

Literature

- to comprehend the main points and central idea
- to understand the underlying meaning of the text
- to analyse the personality of a character

Grammar

- to demonstrate an understanding of grammar structures
- to work on integrated grammar exercises
- to form sentences in indirect speech

Writing

- to organize and present ideas coherently using appropriate vocabulary
- to use an appropriate style and format
- to express ideas in a clear and grammatically correct English, using appropriate punctuation and cohesion devices

Listening

- to listen to a wide range of oral text and respond to them
- to listen critically for specific information
- to follow instructions and directions

Speaking

- to use language effectively
- to develop confidence in spoken English
- to use appropriate tone, posture, gesture, pause and to maintain eye contact while speaking Reading
 - to read silently at varying speed and identify the main points
 - to deduce the meaning of unfamiliar words in a given context
 - to select and extract from the text, information required for a specific purpose

हिंदी

	हिन्दी पाठ्यक्रम (2025-26)							
		कध	क्षा - 9					
	हि	हन्दी पाठ्यपुस्तव	ਸ- 1- क्षिति ज	भाग-1				
			2- कृतिक	ा- भाग-1				
		1	3- व्याकर	ण सुबोध				
माह/कालांश	इकाई	विषयवस्तु				कला		
						समेकित		
						गतिविधियाँ		
		गद्य	पद्य	कृतिका	व्याकरण			
अप्रैल (25)		दो बैलों की	सखियाँ एवं		पत्र, उपसर्ग,	अपने घर		
		कथा	सबद		प्रत्यय, समास।	या बाहर		
						किसी विशेष		
			*दोहों की			पशु या पक्षी		
			अर्थ सहित			के प्रति प्रेम		
			मौखिक			का सचित्र		
			अभिव्यक्ति			वर्णन		
						कीजिए।		
ਸई (17)		ल्हासा की	वाख	इस जल	अपठित	बाढ़ जैसी		
		ओर		प्रलय में	गद्यांश,अर्थ के	आपदाओं से		
					आधार पर वाक्य	निपटने के		
		*मारत का			भेद।	लिए समाज		
		ाकन्हा दा सरोक्तें कि				को क्या-क्या		
		प्रदशा का				कदम उठाने		
		जलवायु एव				चाहिए। इस		
		संस्कृति क				विषय पर		
		वार म				साम्हिक		
		षताइए।				चर्चा की		
						जाएगी।		
जुलाई (20)		उपभोक्तावाद	सवैये		अपठित	उपभोक्तावाद		
		की संस्कृति			काव्यांश,अलंकार,	के		
					अनुच्छेद लेखन।	सकारात्मक		
						और		

						नकारात्मक
						पहलुओं पर
						एक चार्ट
						तैयार
						कीजिए।
अगस्त(23)		साँवले सपनों	कैदी और	मेरे संग	ई-मेल लेखन,	पर्यावरण
		की याद	कोकिला	की औरतें	संवाद लेखन।	संरक्षण पर
				*आप		आधारित
				अपने		एक विज्ञापन
				परिवार		तैयार
				के जिस		कीजिए।
				व्यक्ति		
				से		
				प्रभावित		
				हैं, उनके		
				बारे में		
				अपने		
				भाव		
				प्रकट		
				कीजिए।		
सितंबर(14)	अर्धवार्षिक	(करवाए गए	कार्य की	पुनरावृत्ति)	सूचना लेखन,	आशुभाषण
	परीक्षा				लघुकथा लेखन।	
अक्टूबर(17)		प्रेमचंद के	ग्राम श्री	रीढ़ की	उपसर्ग, प्रत्यय,	ग्रामीण
		फटे जूते		हड्डी	समास (अभ्यास)	संस्कृति एवं
		*'दिखावे की				प्राकृतिक
		प्रवृत्ति' पर				सुंदरता पर
		पक्ष-विपक्ष में				एक पोस्टर
		अपने विचार				बनाइए।
		प्रस्तुत				
		कीजिए।				
नवंबर (23)		मेरे बचपन	मेघ आए		अर्थ के आधार	अपने बचपन
		के दिन			पर वाक्य भेद,	की यादों को
					अलंकार।	साझा करते
					*प्रश्नोत्तरी विधि	

						हुए अनुच्छेद लिखिए।
दिसंबर		गद्य एवं	बच्चे काम		पत्र, ई-मेल, लघु	'बाल श्रम'
(24)		काव्य के	पर जा रहे		कथा (अभ्यास)	विषय पर दो
		बह्विकल्पीय	हैं।			व्यक्तियों
		प्रश्न(अभ्यास)				के मध्य
						होने वाले
						संवाद को
						लिखिए।
जनवरी(16)		करवाए गए	कार्य की	पुनरावृत्ति	करवाई जाएगी।	श्रवण, वाचन
						कौशल।
फरवरी	वार्षिक	करवाए गए	कार्य की	पुनरावृत्ति	करवाई जाएगी।	
(12)	परीक्षा					

शैक्षणिक उद्देश्यः 1. विद्यार्थी भाषा प्रयोग के तौर-तरीकों एवं विधाओं की जानकारी प्राप्त करतें है। लेखन विधि में सृजनात्मकता एवं मौलिकता का विकास होता है। 2. कविता के माध्यम से छात्र कलापक्ष एवं भावपक्ष की पूर्ण अनुभूति प्राप्त करते हुए कविता में निहित भाव को आज के परिवेश से जोड़कर देखने की क्षमता प्राप्त करते हैं। 3. व्याकरण के माध्यम से विद्यार्थी भाषा को शुद्ध बोलने, पढ़ने एवं लिखने का ज्ञान प्राप्त करते हैं। व्याकरण के नियमों का ज्ञान छात्रों में मौलिक वाक्य संरचना की योग्यता का विकास करता है।

MATHEMATICS

Course structure

Units	Unit name	Marks
I	Number System	10
II	Algebra	20
III	Coordinate Geometry	4
IV	Geometry	27
V	Mensuration	13
VI	Statistics	6
	Total	80

Suggested reference books : i) Mathematics by R. D. Sharma ii) Mathematics : Exemplar problems by NCERT iii) Secondary School Mathematics by R.S. Aggarwal

Mon th & perio d	Unit	Content	Learning objectives	S.E/Art-integrated activity
April (25)	Number system	Chapter-1: Number System Introduction to Number System, Irrational numbers Real numbers and their decimal expansions, Real numbers on the number line, Operations on Real numbers, Laws of exponents for real numbers.	 Students will be able to- i) Write rational and irrational numbers between any 2 real numbers ii) represent any real numbers on number line iii) rationalize the denominator of any irrational numbers 	Worksheet-1 Lab Act-1 (Art integrated): Making of colourful Irrational number spiral by line segments.

	Algebra	Chapter-2 : Polynomials Definition of a polynomial in one variables, its coefficients with examples, Terms of A polynomial, zeroes of a polynomial, Remainder and Factor Theorem.	 Students will be able to- i) describe polynomial, terms, degree, zeroes. ii) apply the knowledge of factor theorem and remainder theorem to factorise a polynomial. 	Worksheet-2 Lab Act 2-: Geometrical verification of algebraic identity (Paper cutting and pasting
May (20)	Co Ordinate- geometry	Chapter-3: Co- ordinate Geometry The Cartesian Plane, Co- ordinates of a point, Names and terms associated with co- ordinate plane.	 Students will be able to- i) locate a point plotted on a graph paper ii) explain the terms associated with the co-ordinate plane. 	Lab Act 3- To find a hidden picture by plotting and joining points with given coordinates.
	Algebra	Chapter - 4 : Linear equation in 2 variables. Introduction to linear equation in 2 variables.	 Students will be able to- i) write any linear equation in standard form ii) find solutions of a linear equation iii) frame linear equation from given situation. 	Worksheet-3 Class Act: Story telling and forming linear equations in 2 variables.
Jul. (27)	Geometry	Chapter 5 :- Intro to Euclid's Geometry Geometry in India, Euclid's axioms, postulates and theorems.	 Students will be able to:- i) distinguish between Euclidian and modern geometry ii) define axioms, postulates and theorems 	Worksheet-4 Viva-voce

		Chapter 6: Lines and Angles-	Students will be able to:-	Worksheet-5
		(Motivate) If a ray stands on a	1. understand adjacent angles, linear	
		line, then the sum of the two	pair of angles, vertically opposite	Class Act: To verify
		adjacent angles is 180	angles	experimentally that
		degrees. (Prove) If two lines	2. understand intersecting and no -	if two lines
		intersect vertically opposite	intersecting lines.	intersect, then
		angles are equal. (Motivate)	3. define and understand a system of	vertically opposite
		Lines which are parallel to a	parallel lines and transversal.	angles are equal.
		given line are parallel to each	4. prove that the lines parallel to a	
		other.	given line, are parallel to each other.	
Aug.	Mensura-	Chapter 10: Heron's formula-	Students will be able to:-	Worksheets-6
(26)	tion	Area of triangles using Heron's	1. find the area of a triangle using	
		formula.	Heron's formula	
			2. apply the Heron's formula to	
			calculate the area of triangular	
			surfaces in their day to day life.	
	Geometry	Chapter 7:- Triangles-	Students will be able to:-	Worksheet-7
		Basic terms, criterion for	i) understand the concept of	
		congruence of triangles, the	congruence of geometrical figures.	Art integrated
		angles opposite to equal sides	ii) apply congruency in real life	Activity-
		of a triangle are equal, the	situations.	To draw a design for
		sides opposite to equal angles	iii) understand and apply the	rangoli using
		in a triangle are equal.	theorems of equalities to solve	congruent triangles.
			problems.	
Sep.		Revision of all the previous	Students will be able to:-	Practice worksheets
(12)		chapters	i) clear doubts.	
			ii) Evaluate themselves through self-	
			assessment and peer assessment.	Viva-voce

			Mid-Term Examination	
Oct. (20)	Statistics	Chapter12:- Statistics Bar graphs, histograms (with varying base lengths) and frequency polygons.	 Students will be able to:- i) know the importance of statistics, it's origin and basic definitions. ii) collect data and represent in tabular form. iii) represent data by bar graphs, histograms and frequency polygons. 	Class Activity :- Making of a frequency polygon to represent marks of the students obtained in mid- term examination.
Nov (25)	Mensuration	Chapter-11: Surface areas and Volumes Surface Areas and Volumes of Cuboid, Cube, Right Circular Cylinder, Right Circular Cone, Hemisphere and sphere	 Students will be able to i) derive formulas for the surface areas and volumes of solids ii) solve problems related to surface areas and volumes of solids iii) apply their knowledge to predict surface areas and volumes of 3-D shapes. 	Worksheet-8 Project – Making of 3D model of combined shapes. Viva-voce
	Geometry	Chapter -8: Quadrilaterals Introduction to Quadrilaterals, Angle sum property, Types of quadrilaterals, Properties of a parallelogram, Conditions for a quadrilateral to be a parallelogram, Mid-point Theorem and its converse.	 Students will be able to i) prove the angle sum property of a quadrilateral ii) classify different quadrilaterals iii) solve problems related to parallelograms apply mid-point theorem and its converse to solve problems. 	Worksheet-9 Lab Act 4 : Geometric proof of Mid- Point Theorem.

Dec. (25)	Geometry	Chapter-9: Circles Circles and its related terms, Angle subtended by a chord at a point, Perpendicular from the centre to a chord, equal chords and their distances from the center, Angle subtended by an arc of a circle and Cycliclateral.	 Students will be able to i) define circle and its related terms ii) prove central angle doubling theorem iii) calculate the distance of a chord from the centre of a circle iv) solve problems related to cyclic quadrilateral. 	Worksheet-10 Lab Activity 5:- Geometric proof of Central Angle Doubling Theorem.
Jan. (20)		Revision of all the previous	Students will be able to:-	Practice Worksheet
(20)			ii) evaluate themselves through self- assessment and peer assessment.	Worksheet
Feb.		Revision of all the previous	Students will be able to:-	Practice
(12)		chapters	i) perform the hands-on activities to	worksheet
		Practical Examination	enhance their hand-eye	
		Annual Examination	coordination, observation skills etc.	
			ii) practice time management through	Viva-voce
			class test and surprise tests.	

SCIENCE

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Month	Period	Unit	Content	Learning Objectives	Suggested activity /Art Integrated Activities/ Experiments
Apr.	11	Ch-7 Motion	Distance and displacement, velocity, uniform and non- uniform motion along a straight line, acceleration. Graphical representation of motion: distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion. Elementary idea of uniform circular motion.	 Students will be able to: 1. Know about types of motion and terms related to motion such as distance, displacement, velocity, speed and acceleration. 2. Understand graph representing different types of motion. 3. Understand the concept of uniform circular motion. 	 Crossword puzzle on motion. Activities 7.8,7.9,7.10 (NCERT)
Apr.	11	Ch-1 Matter in Our Surroundings	Physical nature of matter, states of matter and their characteristic properties. SI units of temperature. Inter- conversion of states of matter.	 Students will be able to- 1. Know different states of matter with their characteristic properties. 2. Differentiate between the states of matter on the basis of their properties. 	 To observe diffusion process of ink in hot and cold water. (Activity 1.5 NCERT)

Apr.	11	Ch-5 -The Fundament al Unit of Life	Different Types of cells, Cell structure, different types of solutions. Cell wall, Nucleus- Structure and function.	 Students will be able to: Understand the discovery of cell. Learn the structure and function of Nucleus. Draw various parts of cell. 	• To demonstrate the process of osmosis in raisins. (Activity 1.5 NCERT)
May	09	CH- 8 Force and laws of motion	Force and Motion, Newton's Laws of Motion, Inertia of a body, Inertia and mass,	 Students will be able to: balanced and unbalanced forces. Laws of Motion and their applications in daily life. 	Experiment -To verify laws of reflection of sound.
May	09	Ch-1 Matter in Our Surroundings	Evaporation and factors affecting evaporation, effects of evaporation.	Students will be able to: - Understand the effects of evaporation in day- to-day life.	 Experiment -Preparation of: a) a true solution of common salt, sugar and alum. (b) a suspension of soil, chalk powder and fine sand in water. (c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish

					them on the basis of- transparency, filtration criterion, stability.
Мау	09	Ch-5 The Fundament al Unit of Life	Cell organelles and their functions, Plant cell and animal cell, Cell division.	 Students will be able to: Understand and draw different cell organelles. Compare between Plant and Animal Cell. Understand types of cell division. 	Experiment Preparation of stained temporary mounts of (a) onion peel. (b) human cheek cells & to record observations and draw their labelled diagrams.
Jul.	10	CH- 8 Force and laws of motion	Momentum, force and acceleration, action and reaction forces	 Students will be able to : understand the concept of momentum. Derive the formula for force. action and reaction forces. 	 Identification of Newton's three laws. (Picture based Activity)
		Ch-9 Gravitation	Gravitation: Gravitation, Universal Law of Gravitation, Gravitational force of Earth (gravity) Nature of matter: Elements,	 Students will be able to: Gravitational force and its significance. Mathematical form of law of Gravitation. 	Experiment- Determination of the density of the solid using a spring balance and a measuring cylinder.

Jul.	10	Ch-2 Is Matter Around Us Pure?	compounds and mixtures. Heterogeneous and homogeneous mixtures, Properties of true solution, colloids and suspensions.	 Students will be able to : 1. Distinguish between mixture and pure substances. 2. Know different types of solutions and their characteristic properties. 	Experiment - Preparation of (a) A mixture (b) A compound using iron filings and sulphur powder and distinguishing between these on the basis of: (i) appearance, i.e., homogeneity and heterogeneity (ii) behaviour towards a magnet (iii) behaviour towards carbon disulphide as a solvent (iv) effect of heat.
Jul.	10	Ch-6-Tissue	Tissue, types of plant tissues- meristematic and simple permanent, their location, structure and functions.	Students will be able to: 1. Locate and understand various plant tissues, their functions and learn to draw their diagrams.	Experiment - Identification of (a) Parenchyma, Collenchyma and Sclerenchyma tissues in plants from prepared slides. Draw their labelled diagrams.

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Aug.	11	Ch-10 Gravitation	Acceleration due to Gravity; Mass and Weight; Free fall.	 Students will be able to understand - 1. Concept of mass and weight. 2. Motion of an object in free fall. 	 To find the weight of a person on different planets with change in value of acceleration due to gravity.
Aug.	11	Ch-2 -Is Matter Around Us Pure	Concentration of solution (Numerical), Physical and chemical changes, Pure substances- elements and compounds	 Students will be able to - 1. Understand the difference between Physical and chemical changes, Elements and compounds. 2. Find the concentration of given solutions. 	 Experiment- Perform the following reactions and classify them as physical or chemical changes: a) Iron with copper sulphate solution in water. b) Burning of magnesium ribbon in air. c) Zinc with dilute sulphuric acid. d) Heating of copper sulphate crystals. e) Sodium sulphate with barium chloride in the form of their solutions in water. Comparison between Physical and chemical changes.

Aug.	11	Ch-6-Tissue	Types of complex plant tissues- their location, structure and functions.	Students will be able to: - understand complex tissues, their function and types and learn to draw their diagrams.	 Types of plant tissue (Picture based Activity)
Sep.	12		۱ Mid Te	rm Examination	
Oct.	08	Ch-9 Gravitation	Floatation: Thrust and Pressure. Archimedes' Principle; Buoyancy.	 Students will be able to- 1. Explain the applications of thrust and pressure. 2. Relate Archimedes' principle with floating objects. 	 To study how pressure varies with change in area. Experiment -To establish the relation between loss in weight of a solid when fully immersed in (i)Tap water (ii) Strong salty water
Oct.	08	Ch-10 Work and Energy	Work done by a Force, Energy	 Students will be able to understand – 1. Scientific meaning of work and its types. 2. Identify and list different types of energy. 	

Oct.	08	Ch-3 - Atoms and Molecules	Laws of chemical combination, Molecules and its types, atomic mass, atomic mass unit, Dalton's theory, ions, writing chemical formula.	 Students will learn- 1. Two laws of chemical combination. 2. Ratio by mass of atoms for different compounds 3. to make the chemical formula of different compounds. 	 Experiment- Determination of the melting point of ice and the boiling point of water. Chemical formula for different compounds. (Data based activity)
Oct.	08	Ch-6 Tissue	Animal tissues, types, location and their functions.	Locate and understand various animal tissues with their functions and learn to draw their diagrams.	Experiment - Identification of Striped, smooth, cardiac muscle fibres and nerve cells in animals, from prepared slides. Draw their labelled diagrams.
Nov.	11	Ch-10 Work and Energy	Kinetic and Potential energy; Law of conservation of energy, mechanical power.	 Students will be able to – 1. Understand the phenomenon of transformation of energy. 2. Concept of mechanical Power. 	 To calculate potential and kinetic energies at different heights. (Data based activity)

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Nov.	11	Ch-3 Atoms and molecules	Molecular mass and formula unit mass.	Students will learn to calculate the molecular and formula unit mass of various compounds.	Experiment- Verification of the law of conservation of mass in a chemical reaction.
		Ch-4 Structure of atom	Charged particles in matter, Thomson's Model, Rutherford's model, Bohr's model of an atom, Electrons distribution in different orbits.	 Students will be able to: Learn different models of atom. Learn to distribute electrons in different shells. 	• Activity 3.2 NCERT
Nov.	11	Ch-12 Improveme nt in Food Resources	Crop production, Improvement in crop yields- crop seasons, crop variety improvement- Hybridization, factors for which variety improvement is done, crop production management – nutrient management. Manures and fertilizers, Irrigation, cropping patterns, crop production management, storage of grains.	 Students will be able to: Understand various methods of crop production and its improvement. Know the different types of nutrients. Various cropping patterns and their importance. Different methods of storage of grains. 	• To study different conditions which will give the most benefits to farmers. (Activity NCERT Page – 145)
Dec.	11	Ch-11 Sound	Nature of sound and its propagation in various media, speed of sound, range of	Students will be able to - 1. Understand the	 To draw the sound waves of different (i) pitch (ii) loudness.

			hearing in humans, ultrasound, reflection of sound, echo.	 phenomena of production as well as the propagation of sound. 2. List various characteristics of a wave. 	Experiment - Determination of the speed of pulse propagated through a stretched string / slinky.
				3. Differentiate between different types of waves.	
				4. Understand the phenomenon of reflection of sound.	
				5. Comprehend the concept of ultrasound and its applications.	
Dec.	11	Ch-4 Structure of atom	Valency, Atomic structures of different elements, atomic number and Mass number, Isotopes and Isobars.	 Students will be able to: Find valency of different elements. Determine the atomic mass and atomic numbers of different elements. Differentiate between 	• Activity 4.2 NCERT

Dec.	11	Ch-15 Improveme nt in Food Resources	Animal husbandry – cattle farming, poultry farming, fish production and bee keeping.	 Students will be able to: Learn the different means of animal husbandry. Importance and care of animals for rearing. 	 Activity 12.4 NCERT Crossword puzzle on improvement in food resources. 		
Jan.	18		Revision				
Feb.	9		Annual Exams				

List of experiments -

- 1. Verification of the Laws of reflection of sound.
- 2. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.
- 3. Establishing the relation between the loss in weight of a solid when fully immersed in -

a) Tap water b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.

- 4. Determination of the speed of a pulse propagated through a stretched string/slinky.
- 5. Preparation of: a) a true solution of common salt, sugar and alum
 - b) a suspension of soil, chalk powder and fine sand in water
 - c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of transparency filtration criterion stability
- 6. Preparation of : a) A mixture b) A compound using iron filings and sulphur powder and distinguishing between these on the basis of:
 - (i) appearance, i.e., homogeneity and heterogeneity

(ii) behaviour towards a magnet

(iii) behaviour towards carbon disulphide as a solvent

(iv) effect of heat

- 7. Perform the following reactions and classify them as physical or chemical changes:
 - a) Iron with copper sulphate solution in water b) Burning of magnesium ribbon in air
 - c) Zinc with dilute sulphuric acid d) Heating of copper sulphate crystals
 - e) Sodium sulphate with barium chloride in the form of their solutions in water
- 8. Determination of the melting point of ice and the boiling point of water.
- 9. Verification of the law of conservation of mass in a chemical reaction
- 10. Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labelled diagrams.
- 11(A) Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, from prepared slides. Draw their labelled diagrams.

11(B). Identification of striped, smooth and cardiac muscle fibres and nerve cells in animals, from prepared slides. Draw their labelled diagrams.

SOCIAL SCIENCE

Months/ Periods	Unit	Content	Learning Objectives	Subject Enrichment
April (22)	Economics	 The Story of Village Palampur Organization of Production Farming in Palampur Non -Farming Activities 	Familiarizing the children with some basic economic concepts through an imaginary story of a village.	Picture based questions, concept map
	Pol. Sci.	 What is Democracy? Why Democracy? What is Democracy? Features Why Democracy? Broader meaning 	Develop conceptual skills of defining democracy.	Cartoon interpretation to summarize the benefit of democracy Map Skills- States and
	Geography	 India- Size and Location Location Size India and the World India's Neighbors 	Develop understanding of size and location.	Union Territory Page no. 8, 10 & 11 (Atlas)

May (17)	History	18 th Century - The French	Familiarize students with the	Map based question
		Revolution	names of people involved,	
		• French society during late	different types of ideas that	
		Outbreak of the revolution	inspired the revolution.	
		France abolishes		
		Monarchy and becomes		
		Did women have revolution		
		Abolition of Slavery		
		Revolution and everyday life		
			Understanding the major	Map work (Atlas)
	Geography	Physical Features of IndiaMajor Physiographic Divisions	landform features and the underlying geological structures.	Page no. 20, 21, 23 & 25
July (20)	Geography	Physical Features of India	Identify the River system of the	Poster making on 'Save
	0 1 7	(cont.)	Country and explain the role of	Rivers' and to present the
		Drainage	rivers.	issues on water pollution
		Major rivers and tributaries		and suggest solutions.
		Lakes		
		• Role of rivers in the		
		economy Pollution of Rivers 		

	Pol. Sci.	 Constitutional Design Democratic constitution in South Africa Why do we need a constitution? Making of the Indian Constitution Guiding Values of the Constitution 	Understanding the process of Constitution Making.	Role play strategy for creation of Indian constitution
	Economics	 People as Resource Economic activities by men and women Quality of Population Unemployment 	Understanding how population can be asset or liability for the nation.	Case-study on quality of population (classroom discussion)
August	Geography	Drainage (Cont.)		
(23)	Pol. Sci.	 Electoral Politics Why Election? What is our System of Elections? What makes election in India democratic? 	Familiarize with Indian electoral system.	Design and present election manifesto
	History	Socialism in Europe and The Russian Revolution • The age of social change • The Russian Revolution	Explore the history of Socialism through a study of the Russian Revolution.	Speech on 'Democracy versus Monarchy'

Sep. (10)	History	 The February Revolution in Petrograd What changed after October? The Global influence of the Russian Revolution Socialism in Europe and 		
		Russian Revolution (cont.)		
		MID TE	RM EXAMINATION	
Oct. (19)	History	 Pastoralists in the Modern World Pastoral Nomads Colonial rule and Pastoral life Pastoralism in Africa 	Analyze the impact of modern states, contraction of Pastures in the modern world	
	Pol. Sci.	 Working of Institution How is major policy decision taken? Parliament Political executive Judiciary 	Identify the role of Parliament and its procedures.	Watch videos of parliament and discuss the importance of question hour
	Geography	Climate Climate Controls The Indian Monsoon Distribution of Rainfall 	Identify various factors influencing the climate and explain the climatic variation of our country	Graphical Representation on temperature and rainfall of different cities

		Monsoon as a Unifying bond		
Nov. (22)	Geography	Climate (cont.)		
	History	 Forest Society and Colonialism Why Deforestation? The rise of commercial Forestry Rebellion in the Forest Forest Transformation in Java 	Discuss social and cultural world of Forest communities through the study of specific revolts	Inter disciplinary project
	Economics	 Poverty As Challenge Poverty as seen by social scientists Poverty estimates Vulnerable Groups Interstate disparities Global Poverty Scenario 	Identify Vulnerable group and interstate disparities.	Debate "whether education can remove poverty"
	Pol. Sci.	Democratic Rights Life without Rights Rights in a democracy 		

Dec. (24)	Pol. Sci.	Democratic Rights Fundamental RightsExpanding Scope	Recognize the need for Rights in one's life	Debate 'democracy is meaningless without rights'
	History	 Nazism and The Rise of Hitler Birth of the Weimar Republic Hitler's rise to power The Nazi Worldview Youth in Nazi Germany Ordinary People and the crimes against humanity 	Discuss the critical significance of Nazism in shaping the politics of modern world.	Watch video clippings of the last days of Adolf Hitler and discuss the reasons for rise and fall of Hitler
	Geography	Natural Vegetation and Wildlife (inter disciplinary project) Population • Size • Distribution • Population Growth • Processes of Population change • NPP	Explain the nature of diverse flora and fauna as well as their distribution. Analyze the uneven nature of population distribution and show concern about the large size of our Population distribution.	Infer the reasons behind the uneven distribution of population in India.

Jan. (16)	Economics	 Food Security in India What is food Security? Why food Security? Who is food insecure? What is Buffer Stock? What is public distribution system? 	Appreciate and analyze the role of government in ensuring food supply.	Project on FCI
Feb. (11)		Revision	Annual Examination	

ARTIFICIAL INTELLIGENCE

Month &	Unit / Chapter	Content (Artificial Intelligence-KIPS)	Learning objectives	Activity
Periods		Subject Unit-1 AI Reflectio	Specific Skills	
	Introduction to Al	 What is Intelligence? Why AI? History of AI Applications of AI in daily life AI domains, relationship between different domains 	 To understand what is artificial intelligence & appreciate AI To learn & be able to describe the applications of AI in daily life To learn different AI domains and how they are interrelated 	 Play block – NLP based game in which the machine identifies the word based on a sentence.
Anril		Unit -1 (En	nployability skills)	
(12)	Ch-01 Communication Skills – I	 Methods of communication Meaning of communication Importance of communication Elements of communication 	• To learn about different methods & types of communication & it's importance.	 Writing pros & cons of written, verbal and non-verbal communication Listing Dos & don'ts for avoiding common body
		Subject Unit-1 in	t specific skills troduction to Al	language mistakes

May (9)	Al Project Cycle	 Introduction to AI Project Cycle Need of AI Project Cycle Different Steps of AI Project Cycle Project Cycle Mapping 	 To learn about the AI Project Cycle To understand the different steps involved To learn about Problem Statement Template, 4 W's Canvas To learn different data Acquisition & data Exploration Techniques. 	• Kibo's activity 7: Fill in the details of any 3 types of data visualisation techniques that you have learnt from datavizcatalogue.com
		Emplo	yability skills Unit -1	
	Ch-01 Communication Skills – I	 Perspective in communication Factors affecting perspective Visual, language & past experiences Writing skills – phrases, kinds of sentences, parts of sentences, parts of speech Use of articles, construction of paragraphs 	 To learn about perspective & factors affecting perspective To learn about the writing skills 	 Group discussion on factors affecting perspective Demonstration & practice of writing sentences & paragraphs on topics related to the subject

		Subject Unit-1 In	t Specific Skills troduction to Al	
Jul. (12)	<u>Al Project Cycle</u> <u>Al Ethics</u>	 AI Modelling Evaluation Techniques Deployment Morals & Ethics Morals vs Ethics 	 To learn about different modelling approaches To learn about evaluation & deployment of an AI Model and different methods To develop a basic understanding of morals and ethics, also to understand the difference between morals and ethics 	 Pg 85 Part B, Al Imagine Applying Mental Models Pg Part B,Al investigate Explore More Act.1 Kibo's activity 10 : Balloon Debate: Is Al a boon or a bane?
		• Meaning of self- management	yability Skills Unit -2 • To learn what is self management & about self	 Give yourself positives strokes by saying 5
	Ch-02 Self Management Skills – I	 Self-management skills Factors building self- confidence Factors that help in honing self-management skills 	management skills • To learn about the factors that help building confidence in an individual	 good things to yourself on waking up. Write in 50 words how you felt for the entire week Observe your local leaders and analyse how they try to help the society or serve the community at a large

		Subje Unit-1	ect specific skills Introduction to Al		
Aug. (12)	<u>Al Ethics</u>	 Need of AI Ethics Ethical issues with AI AI Bias AI Access Advantages & disadvantages of AI 	 To understand the need of AI Ethics and Ethical issues associated with AI. To learn about different biases in AI. To learn the advantages and disadvantages of AI. 	• 2 AI case studies associated with ethical concerns related to AI	
	Employability skills Unit -3				
	Ch-03 Basic ICT Skills	 Role of ICT in daily lives Intro to ICT, importance of ICT in personal life and at workplace Identify the various components of the computer system 	 To learn about the role & importance of ICT in our daily lives To learn and to make them able to identify various computer components 	 Identify various peripherals and components on your computer system in the lab and write their uses 	

		Su U	bject specific skills nit-2 Data Literacy	
		 Introduction to Data Literacy 	 To Understand what is data literacy & it's need 	• Kibo's Activity 9: Usability of data pg 111
Sep. (6)	Basics of Data Literacy	 How to become Data literate? Data Privacy & Data Security 	 To learn about Data Privacy & Data security and their relation with AI 	
		• Cyber Security	 To learn the best practices for cyber security 	
		E	mployability skills	
			Unit -3	
	СН-03	 Identify various peripheral devices 	 To learn about the role & importance of ICT in our daily lives 	 Identify various services / features offered by Gmail and briefly write about them
	Basic ICT Skills	 Performing basic computer operations, types of OS 	 To learn and to make them able to identify various computer 	all
		 Connect with the world using internet and it's applications 	components	

		S L	ubject specific skills Jnit-2 Data Literacy			
Oct. (12)	Acquiring, Processing, and Interpreting Data	 Types of Data Data Acquisition & various sources Data Preprocessing Data Interpretation-Meaning, need and types Data Visualisation using TABLEAU 	 To learn about the different types of data To learn about various Data Acquisition techniques To understand the meaning, need and types of Data interpretation techniques To learn data visualisation on TABLEAU 	 Pg 126 to Pg 131 demonstration of Data Visualisation using TABLEAU 		
	Employability skills Unit -4					
	Ch-04 Entrepreneurial Skills-I	 Identify various types of business activities Types of business enterprises Entrepreneurship development Characteristics & roles of an entrepreneur 	 To learn about different types of business activities To learn about the idea of entrepreneurship in it's true sense 	• Discuss the various types of activities, generally adopted by small businesses in local community		

		Subject s UniT-3 I	pecific skills Nath for Al		
Nov. (12)	Importance of Math for AI Statistics Probability	 Relation of Math ad AI Essential Mathematics for AI Application of Statistics Uses of Statistics in real life Introduction to Probability Applications of Probability in real life 	 To understand the need to learn Math for AI To learn the application of Statistics and Probability in AI 	• Pg 174 and Pg 17 Al Imagine: Activity 1 & 4	
	Employability skills Unit -5				
	Ch-05 Green Skills – I	 Intro to environment Relationship between society, environment, ecosystem, & factors causing imbalance Natural resource conservation 	 Understanding environment and the idea of green skills To learn the relationship between society, environment, ecosystem & factors causing imbalance To understand natural resource conservation 	• Prepare a poster detailing the relationship between man and environment in various periods	

	Subject Specific Skills Unit-4 Generative Al				
Dec. (12)	Generative AI	 Concepts behind Generative AI Generative vs Conventional AI Types and Examples of Generative AI Benefits and limitations of using Generative AI 	 To understand the basic concept behind Generative AI and LLMs To be able to compare Generative AI with conventional AI To learn about different examples of Generative AI To learn about benefits and limitations of Generative AI 	• Al Experiment 3: Runway ML – Hands on Activity	
	Employability skills Unit -3				
	CH-05 Green Skills – I	 Environment protection & conservation Definition of green economy Importance of green economy 	 To learn about environment protection & conservation To understand the definition & importance of green economy 	• Prepare a project on various aspects of green economy	

	د Unit	5 Introduction to Python	
Jan. (12) Introduction to Python Basics	 Introduction to python Python IDE – different modes Python character set Data types, Boolean arithmetic Operators: arithmetic, logical, relational Input function in python Programming in python – sequential statements, selective & iterative statements Loops in python – while, nested while, for, nested for Range () function Jump statements 	 To understand what is python, why is it used or why is python preferred for AI over other oops languages. To learn about different modes of python, character set, data types, Boolean datatype, Boolean arithmetic, operators in python To learn about sequential statements like if , if-elif, if-elif-else and nested if To learn about iterative statements or loops like while or for, jump statements like break or continue and their use in programs 	• Practical Work

		Subj	ect specific skills	
		Unit-5 In	troduction to Python	
		 Creating strings, traversing a string using for 	• To learn how to create a string in different ways	Practical Work
Feb.	Introduction to Python	 String operations - concatenating strings, replicating strings, membership operators 	 To learn about different string operations like concatenation, replicating strings, 	
(12)	-Strings & lists in Python	 Comparison operators, string slicing, string built in functions 	membership operators, comparison operators	
	Fython	 Creating lists, traversing a list using for 	 String indexing & slicing 	
		 List operations- slicing lists, replicating lists, reversing a list 	• To learn how to create a list in different ways & how to traverse a list, indexing	
		 Lists are mutable Functions like append (), extend (), count(), deleting 	• To learn the similarities between lists & strings	
			• To learn about different list operations like replicating strings, reversing a list, slicing	
			• To learn how lists & strings are different based on mutability	

ART & CRAFT

Month	Period	Topic/content	Learning objectives
April	2	1. Elements of Art 2. Proportation	Students will learn Elements of Art- Line, Space, colours, texture & proportion
Мау	2	Colour Theory	Revision of Primary and Secondary colours
July	4	1. Perspective Drawing	Students will learn different types of perspectives
August	4	1.Still life drawing 2.Shading with pencil shade	Students will learn still life drawing and shades with pencil shade, Oil pastel, water colour, and water proof ink.
September		Half yearly Exam	
October	4	1.Caricature Drawing 2. Nature Study 3. Landscape	Students will learn cartoon drawing also nature drawing

November	4	1.Human body proportion 2. Sketching	Students will learn Proportion drawing and sketching
December	4	1.Folk and Tribal Art 2.Poster Design	Students will learn different types of Art and poster designing
January	4	1. Calligraphy	Students will learn card making Logo designing etc.
February	4	1.Submission of Art File	

MUSIC

Month	Periods	Content
April -May	7	Sargam-5 Ekgun and Dugun with harmonium, prayer song (Teri Panah page- 71) Baisakhi song, Mother's day song
July -August	8	National song notation with harmonium, prayer (Oo Palanhare page - 61) patriotic song, Raksha bandhan song
September - October	8	Sargam (6-10) with harmonium, Raag Khamaaj(Swar Lipi), prayer song (Ae Malik tere Bande hum page-63) Janmashtami, Dussehra song
November - December	8	National song (notation), prayer song (Jaise Sooraj ki garmi se), folk song, diwali special song, Christmas Carols
January - February	7	Patriotic song and revision, Mahashivratri, Holi song

Learning Objectives:

- 1. To learn to play sargam on harmonium.
- 2. To learn prayers, national anthem and patriotic songs.
- 3. To learn Devotional and folk songs.

GUITAR

Month	Period	Content
April and May	7	Introduction to guitar
		Anatomy of guitar
		Beginner scale
		Beginner strumming
		Prayer song- Count your blessings
		Pg. no. 46
July and Aug	8	Fundamental guitar skill
		Prayer song – Power of love Pg. No. 44
Sept-Oct-Nov	12	The twelve half steps and basic notation
Dec – Jan- Feb	11	Scales: Constructions and fingerings
		Chords: Building easy triads and power chords.
		Christmas songs -0 Hallelujah and prayer song – We should not be moved –Pg No. 234

Learning Objectives :

- **1.** To learn how to hold a guitar and learn open strings.
- 2. To understand hand positions.
- 3. To learn how to strum up and down.

SITAR

Month	Period	Content
April & May	7	Introduction Scale: Sargam and meend learning Sargam practice dogun & chargun,
		1 Devotional Song, rag bhupali
July & Aug	8	Different Strings Exercise Devotional song &1 Patriotic song
Sep & Oct	8	Different Strings Exercise & 2 devotional Songs
Nov, Dec & Jan	11	Different Strings Exercise, 1 Prayer Song & 1 Patriotic Song Hum honge kamyab and Shri Krishna song
Feb	2	Revision Work

Learning Objectives:

- To understand hand positions
- To learn to play sargam and its stroke
- To learn to play patriotic song & devotional song

TABLA

Month	Period	Content
April and May	7	Teen tal 16 matra vilambit Madhya leh Beginner bbol of table dha dhin dhin dha Beginer technique of teen tal
July and Aug	8	Kayda no 1
Sept-Oct-Nov	12	Kayda number 2 vilambit leh
Dec – Jan- Feb	10	Teen talk daadra kegerwa tihai tukdaa

Learning objectives :

- 1. To understand hand positions
- 2. To learn how to play hastasadhan
- 3. To learn to play different taals.