

*Let knowledge grow from more to more
and more of reverence in us dwell.*

*That mind and soul according well
may make one music as before.*



Unitization of Syllabi

Year, 2018

**STATE INSTITUTE OF EDUCATION
KASHMIR**

Class 6th - 9th

PREFACE

Based on the findings of NAS 2017 and the suggestions received from the field teachers and other stake holders, the State Institute of Education Kashmir has conducted five-day workshop to review the existing unitization of syllabi for class 1st – 9th. The workshop was attended by the reputed pedagogues of the valley. Among different activities and programmes of SIE, the development of syllabi-cum-unitization is aimed at working out an academic schedule for the schools. The schedule facilitates the schools to plan their activities with an eye on main learning objectives so that the academic calendar is meaningfully utilised in teaching and learning throughout the session.

The objectives highlighted are aimed at facilitating the teachers to plan their class room activities in a meaningful and productive manner. The teachers while planning for the class room transactions must keep in mind the learning outcomes as the new trend of assessment of students under CCE. The assessment (internal or external) is done mainly on the basis of Learning Outcomes. The National Achievement Survey 2017 was also based on LOs, the result of which has come recently in the form of District Report Cards. This is also to bring in the element of accountability and facilitation for effective monitoring.

The text book development as per National Curriculum Framework 2005, being under process at J & K Board of School Education, requires the revision and updating of the existing document. Therefore, SIE welcomes any constructive suggestions from all the stake holders to make this exercise more effective in future.

I am thankful to faculty members of SIE , DIETs and the Field subject experts especially the ones who were practically involved in getting this document set and wish all the best to my teachers and students in all endeavours.



Mehboob Hussain

Joint Director/Principal SIE

Guiding Principles of Curriculum Development

- ❖ Connecting knowledge to life outside school.
- ❖ Ensure that learning is shifted away from rote methods.
- ❖ Enriching the curriculum for overall development of children rather than remain text book centric.
- ❖ Making Examination more flexible and integrated with classroom life.
- ❖ Nurturing and overriding identity informing by caring concern within the democratic polity of the country NCF 2005

Diagonal Linkage

Class 6th – 9th

Content Load	Evaluation				
	Unit 1	Unit 2	Term 1	Unit 3	Term 2
Unit 1=15%	10%	...	5%	...	...
Unit 2=15%	...	10%	5%	...	...
Term 1=20%	...	...	20%	...	...
Unit 3=15%	...	...	...	10%	5%
Term 2=35%	...	...	...	...	35%
Total= 100%	10%	10%	30%	10%	40%

SYLLABUS TO BE COVERED	CONTENTS	Learning Outcomes	Suggested Pedagogical processes
U1 15%	<ol style="list-style-type: none"> 1. A Different Kind of School 2. Beauty 3. A Tale of Two Birds 	<ul style="list-style-type: none"> • Participate in individual talk viz introducing oneself and other persons; participate in role play/make a speech, reproduce speeches of great speakers. • Become familiar with poems/songs/prose in English through input rich environment, interaction, classroom activities, etc. • Concept of beauty/ development of aesthetic value. • Sympathy and sharing of worries. • Environment moulds the character. • Read, discuss the ideas of the text for critical thinking. 	<p>The learner:</p> <ul style="list-style-type: none"> • Participates in activities in English like role play. • Reads a variety of texts in English/Braille and identifies main ideas, characters sequences of ideas and events and relates with his/her personal experiences. • Talks about beauty in its various forms. • Develops reading and listening skills. • Develops social relations.
U2 15%	<ol style="list-style-type: none"> 1. Who did Patrick's homework? 2. Where do all teachers go? 3. A House, A Home. 4. The friendly mongoose 	<ul style="list-style-type: none"> • Teaching stories about elves, fairies etc. • Experimental learning. • Development of positive attitude. • Concept of animal behavior. • Development of life skills. • Locate sequence of ideas, events and identify the main idea of a story/poem through various types of comprehension questions. 	<p>The learner:</p> <ul style="list-style-type: none"> • Develops the art of creativity and imagination. • Recites and shares poems, songs, jokes, riddles, tongue, twisters etc. • Writes coherently with focus on appropriate beginning, middle and end in English/Braille. • Use of some poetic devices. • Writes grammatically correct sentences for a variety of situations using noun, pronoun, verb, adverb, determiners etc. • Human/animal behavior.

<p>T1 20%</p>	<ol style="list-style-type: none"> 1. Prophet Muhammad (PBUH) 2. Moosa Ali's Camel 3. Vocation 4. First Day at School 5. The Shepherd's Treasure 	<ul style="list-style-type: none"> • Prophet Muhammad (PBUH) Reformer/benefactor • Use dictionary as a reference book for finding multiple meanings of a word in a variety of contexts. • Teaching of participle • Camel habitat. Deserts • First Day at School experiences. • Development of listening. Listen to English News (TV, radio) as a resource to develop listening comprehension. • Concept of honesty. • Take dictation of words, phrases, simple sentences and short paragraphs. 	<p>The learner:</p> <ul style="list-style-type: none"> • Learns about moral values. • Uses meaningful sentences to describe/narrate factual/imaginary situations in speech and writing. • Learns about life in a desert. • Refers to a dictionary to check meaning and spelling and to suggested websites for information. • Uses synonyms, antonyms appropriately, deduces word meanings from clue in context while reading a variety of texts. • Responds to announcements and instructions made in class, school assembly, railway station and in other public places. • The victory of honesty and wisdom. • Short paragraphs as dictated by the teacher. • Use of present and past simple and continuous.
<p>U3 15%</p>	<ol style="list-style-type: none"> 1. The Kashmiri Shawl 2. What do we plant? 3. Granny's Fabulous Kitchen. 	<ul style="list-style-type: none"> • Art and crafts of Kashmir. Learning of adjectives and prepositions. • Summarize orally the stories, poems and events that he/she has read or heard. • Importance of plantation. • Raise questions based on their reading. • Use ICT (Internet, Mobile, Websites, Youtube, Ted Talks etc.) to browse for information for projects/ ppts etc. • Traditional foods. 	<p>The learner:</p> <ul style="list-style-type: none"> • About heritage of Kashmiri Shawl. • Importance of plantation. • Use of adjectives, prepositions. • Use of present perfect and past perfect tenses. • Responds to oral messages, telephonic communication in English and communicates them in English or home language. • Food varieties.

<p>T2 35%</p>	<ol style="list-style-type: none"> 1. An Indian American Woman in Space 2. Reusing the waste. 3. Time you old Gypsy Man 4. What is Green? 5. The Story of the Hills. 	<ul style="list-style-type: none"> • Inculcating scientific temper. • Watch/listen to English movies, serials, Educational Channels with subtitles, audio-video materials, teacher reading out from materials and to understand and respond. • Read out a nature poem. What nature makes man feel. Pastoral experiences. • Look at cartoons / pictures/comic strips with or without words, and talk/write about them. • Raise questions based on their reading/ discuss the ideas of the text for critical thinking. 	<p>The learner learns</p> <ul style="list-style-type: none"> • About women astronauts. • Usefulness of waste material. • Value of time. • Use of future tense. • Usefulness of waste materials. • Formation of new words through fixation. Conjugation of verbs, clauses- dependent and independent. • Develops writing skill, revises and writes short paragraphs based on verbal print and visual clues. • Visits a language laboratory. • Learns about nature in its various forms. • Learns poetic devices. • Writes a book review.
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S. No	Unit/term %age of syllabus to be covered	CONTENTS	Learning Outcomes	Pedagogical processes involved
1.	U1 15%	The Markhor	<ul style="list-style-type: none"> Speaks about excerpts, short films, news and debate on TV and radio, audio/video programmes on suggestive websites. Reads textual, non-textual materials in English/Braille with comprehension. 	<ul style="list-style-type: none"> Watch and listen to English movies, serials, Educational channels and audio/video materials. Read stories/plays in English and locate details, sequence of ideas and events.
2.		Windows	<ul style="list-style-type: none"> Recites poems with appropriate pause, intonation and pronunciation. 	<ul style="list-style-type: none"> Interpret tables , charts, diagrams and maps and incorporate the information in writing.
3		Trees	<ul style="list-style-type: none"> Takes notes while teacher teaches from books/ from online materials. 	<ul style="list-style-type: none"> Use audio/visual aids to browse for information etc.
1.	U2 15%	Lal Ded	<ul style="list-style-type: none"> Read a variety of text for pleasure e.g. biography, travelogue, etc. 	<ul style="list-style-type: none"> Read texts, both familiar/unfamiliar and write answers for comprehension and inferential questions.
2.		Windows	<ul style="list-style-type: none"> Participates in different activities in English such as role play, poetry recitation, skit, drama, debate, speech, etc. 	<ul style="list-style-type: none"> Provide opportunities to learners to participate in different events/activities in English in the classroom, school assembly and organized by different Institutes.
3		Three questions	<ul style="list-style-type: none"> Infers the meaning of unfamiliar words by reading them in context. 	<ul style="list-style-type: none"> Think critically on inputs based on reading and interaction and try to suggest solutions to the problems raised.

1.	T1 20%	Tobacco- The Silent Killer	<ul style="list-style-type: none"> Reads to seek information from book/ online. 	<ul style="list-style-type: none"> Use materials from various sources in English and other languages to facilitate comprehension and co-relation.
2.		A Mad Tea Party	<ul style="list-style-type: none"> Refers to Dictionary, Thesaurus and Encyclopedia to find meanings/ spellings of words while reading and writing. 	<ul style="list-style-type: none"> Allow the learners in classroom to refer sources suggest Dictionary, Thesaurus and Encyclopedia to facilitate reading.
3		The Rebel	<ul style="list-style-type: none"> Uses appropriate grammatical forms in communication (e.g. verb, time and tense, passivation, Adverb etc.) 	<ul style="list-style-type: none"> Draft, revise and write with appropriate beginning, middle and end along with punctuation marks.
4		The Little Girl		
1.	U3 15%	Macbeth	<ul style="list-style-type: none"> Responds to different kinds of instructions, requests, directions in varied contexts like school, home, playground, railway station, airport, bus terminal, taxi stand etc. 	<ul style="list-style-type: none"> Share their experiences such as journeys, visits, etc. in pairs/ groups.
2.		Sympathy	<ul style="list-style-type: none"> Identifies details, characters, main idea and sequence of ideas and events in textual / non textual material. 	<ul style="list-style-type: none"> Read stories / plays (from books and other sources in English/ Braille and locate details, sequence of ideas and events and identify main idea.
3		Face Showing	<ul style="list-style-type: none"> Writes descriptions/ narratives showing sensitivity to gender, environment and appreciation of cultural diversity. 	<ul style="list-style-type: none"> Attempt creative writing, like stories, poems, dialogues, etc.

1.	T2 35%	Fetching the doctor	<ul style="list-style-type: none"> Asks and responds to questions based on texts (from books or other resources) and out of curiosity. 	<ul style="list-style-type: none"> Summarize orally and in writing a given text, story or an event.
2.		The Bahu Fort	<ul style="list-style-type: none"> Thinks critically, compares and contrasts characters, events, ideas, themes and relates them to life. Writes formal letters, personal diary, list, e-mail, etc. 	<ul style="list-style-type: none"> Think critically or inputs based on reading and interaction and try to provide suggestions, solutions to the given social issues.
3		To sleep	<ul style="list-style-type: none"> Writes dialogues from stories and stories from dialogues. 	<ul style="list-style-type: none"> Attempt creative writing, like stories, poems, dialogues, etc. Learn vocabulary associated with various professions.
4		The Gumbie Cat	<ul style="list-style-type: none"> Visits a language laboratory and writes a book review. 	<ul style="list-style-type: none"> Visit a language laboratory and write a book review.
5.		A Shadow		
6.		Lalajee		

Unit/term %age of syllabus to be covered	CONTENTS	LEARNING OUTCOMES	Pedagogical processes involved
U1 15%	<ol style="list-style-type: none"> How teachers learn. (prose) A Nation's Strength (Poem) The Unthankful Man (Short Story) 	<p>The learners will be able to</p> <ul style="list-style-type: none"> Use formulaic/polite expressions to communicate such as 'May I borrow your books?', 'I would like to differ', etc. Speak short prepared speeches in morning assembly. Read excerpts, dialogues, poems, commentaries of sports and games, speeches, news, debates on TV, radio and expresses opinion about them. Narrate stories (real or imaginary) and real life experience in English. Read textual/ non-textual materials in English with comprehension. Read, compare, contrast, think critically and relate ideas to life. 	
U2 15%	<ol style="list-style-type: none"> Life (Prose) Porus and his elephant (Poem) Achilles (Short Story) 		
T1 20%	<ol style="list-style-type: none"> Global Warming (Prose) The Bangle Sellers Prayer for strength The Brook (Poem) Rustum and Sohrab (Short story) 		
U3 15%	<ol style="list-style-type: none"> For God's sake, Hold Thy Tongue (Prose) Mercy (Poem) Colours of Rainbow (Short story) 	<ul style="list-style-type: none"> Infers the meaning of unfamiliar words by reading them in context. Refer dictionary, Thesaurus and Encyclopedia as reference books for meaning and spelling while reading and writing. Communicate accurately using appropriate grammar. Write a coherent and meaning paragraph through the process of CODER. Write some creative write ups, like stories, poems, dialogues. Answer any question textual or non-textual in writing/orally. Write messages, e-mails, notices, letters, diary entries, etc. 	
T2 35%	<ol style="list-style-type: none"> Polo- The King of Games. Julius Caesar. (Prose) Wrinkles Meeting poets. Stars speak to man. Summer and Winter (Poem) A Strange Trial (Play) 		

Class: 9th Sub: English (Tulip Series Book IX)

Course	Contents	LEARNING OUTCOMES	Suggested Pedagogical Processes and Tips for teaching	Scheme of Assessment
Unit I	1. Packing 2. No Men Are Foreign 3. The Adventures of Toto 4. Grammar: Articles – A, An & The	The learner – <ul style="list-style-type: none"> • listens to simple instructions, announcements in English made in class/school and act accordingly • enrich vocabulary in English mainly through telling and re-telling stories/folk tales • writes/types dictation of short paragraphs 	The learner may be provided opportunities in pairs/groups/ individually and encouraged to – <ul style="list-style-type: none"> • listen to simple instructions, announcements in English made in class/school and act accordingly • participate in classroom discussions on questions based on the day to day life and texts he/she already read or heard • read independently and silently in English/ Braille, biographies, autobiographies, folk/fairy tales etc. • participate in role play, enactment, dialogue and dramatization of stories read and heard • understand different forms of writing (formal/informal letters, e-mail, diary entry etc.) • learn grammar in a contextual and integrated manner and frame grammatically correct sentences • enrich vocabulary in English mainly through telling and re-telling stories/folk tales • practise reading aloud with pause and intonation. • infer the meaning of unfamiliar words from the context • take dictation of paragraphs from known and unknown texts • be sensitive to social and environmental issues such as mercy to animals, equality, conservation of natural resources, etc. • enrich vocabulary through crossword puzzles, word chain, etc. • appreciates verbally and in writing the variety in food, dresses and festivals as read/heard in his/her day to day life and story book, seen in videos, films, etc 	The teacher is suggested to test all the four skills of language viz. listening, speaking, reading and writing of the learners. It is recommended to lay more emphasis in Unit Tests on listening and speaking skills of the learners as by and large these skills are often ignored while testing. Reading and writing may be tested in terminal exams on the basis of Constructivist approach where emphasis must be laid on comprehension and application of

				knowledge rather than memory.
Unit II	1. Gulliver in Lilliput-I & Gulliver in Lilliput-II 2. To Blossom 3. Beauty 4. Moti Guj-Mutineer 5. Use of Punctuation Marks	<ul style="list-style-type: none"> • participate in classroom discussions on questions based on the day to day life and texts he/she already read or heard • be sensitive to social and environmental issues such as gender equality, conservation of natural resources, etc • Listens and speaks briefly on a various social issues. • Use of punctuation marks 		
Term I	1. Saint of the Gutters 2. Shaikh Noor-ud-Din Wali(RA) 3. The Road Not Taken 4. I Cannot Remember My Mother 5. Old Man at the Bridge 6. If I Were You 7. Letter writing,	<ul style="list-style-type: none"> • read independently and silently in English/ Braille, biographies, autobiographies, folk/ fairy tales etc. • expresses orally her/ his opinion/ understanding about the story and characters in the story, in English/ home language. • recites poems individually/ in groups 		

	e-mail & diary entry	<p>with correct pronunciation and intonation</p> <ul style="list-style-type: none"> • understand different forms of writing (formal & informal letters, e-mail, diary entry etc.) • participates in role play, enactment, dialogue and dramatisation of stories read and heard • take dictation of paragraphs from known and unknown texts 		
Unit III	1. The Fun They Had 2. On Killing a Tree 3. Cart Driver 4. The Last Leaf 5. Tenses	<ul style="list-style-type: none"> • practise reading aloud with pause and intonation. • infer the meaning of unfamiliar words from the context • develops imagination/creativity through story telling. • recites poems (Clearly and Fluently) 		
Term II	1. The Tempest-I & The Tempest-II 2. How a Client was Saved 3. To the Cuckoo	<ul style="list-style-type: none"> • enrich vocabulary through crossword puzzles, word chain, etc. • appreciates verbally 		

	4. The Palanquin Bearers 5. The Child's Prayer 6. The Happy Prince 7. A Basketful of Sea Trouts 8. Change of Narration 9. Paragraph Writing	and in writing the variety in food, dresses and festivals as read/heard in his/her day to day life and story book, seen in videos, films, etc. • develops language through conversation and storytelling • learn grammar in a contextual and integrated manner and frame grammatically correct Sentences		
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Note: “The teachers shall apply different methods and materials to enable children develop the understanding of concepts embedded in the themes wherein multilingual approach has also a role. Moreover, the activity oriented textual exercises are important for the linguistic development of students and these should be transacted through variety of activities viz games, puzzles, jigsaw, matching, Questioning, debating, discussing, role playing and dramatizing etc etc. The project work and art integrated learning are also the foremost strategies of teaching

Class 9th Mathematics

Course	Content	Key learning goals
Unit I	Number Systems	<p>To have the understanding of rational and irrational numbers</p> <p>To be able to identify the rational / irrational numbers on the basis of their decimal representation</p> <p>To be able to find some rational /irrational numbers between given two rational /irrational numbers</p> <p>To be able to locate rational/ irrational numbers on number line</p> <p>To be able to operate rational /irrational numbers</p>
	Construction	<p>To be able to construct the angles using straight edge and compass. (60^0, 90^0, 45^0, 120^0, etc)</p> <p>To be able to construct equilateral triangles.</p>
Unit II	Construction	<p>To be able to construct the triangle with other given situations.</p> <p>To have the understanding of polynomials</p> <p>To have the knowledge of zeros and degree of polynomials</p> <p>To be able to divide a polynomial by another polynomial.</p>
	Polynomials	<p>To have the concept of remainder and factor theorem and be able to use these theorems.</p> <p>To have the understanding of Algebraic identities and have the understanding to use these identities</p>
	Linear Equation	<p>To have the knowledge of linear equations in one and two variables.</p> <p>To be able to solve the linear equations algebraically as well as graphically/Geometrically.</p> <p>To have the knowledge of equations of lines parallel to X-axis and Y-axis.</p> <p>To have the understanding of framing linear equation from the given statements.</p>
Term 1 st	Lines and Angles	<p>To have the knowledge of Euclid's Definitions, Axioms and Postulates</p> <p>To have the knowledge of (Types of angles, Complimentary, supplementary, linear pair, vertically opposite, corresponding, alternate angles)</p> <p>To have the knowledge of all types of triangles.</p>

	Triangles	To have the understanding angle sum property of a triangle and exterior angle theorem. To have the concept of triangular inequality. Congruence of triangles and criteria for congruence.
	Logarithm	To have the understanding logarithm and be able to convert logarithm form into exponent and vice versa. To have the understanding Laws of Logarithm and their use in proper situations.
Unit III	Co-ordinate Geometry	To have the knowledge of Cartesian plan. To be able to locate and identify the coordinates of a located point.
	Statistics	To have the understanding of data and be able to collect data locally and interpret it tabulated form. To be able to represent the data graphically To have the knowledge of mean, mode and median and have understanding to use these in daily life problems.
	Quadrilaterals	To have the understanding of different types of quadrilaterals and their properties. To be able to compare the different quadrilaterals and be able to identify the common properties etc.
Term 2 nd	Area of parallelograms	To have the understanding of area. To have the knowledge of figures having same base and between same parallels. To have the knowledge of median of a triangle and its importance in it. To have the understanding of surface area and volume. To have the knowledge of different formulae used to calculate the surface area and volume of different solids. To be able to use the concept to calculate the volume and surface area of; Volley ball, Class room, Drum, book etc (Local Objects)
	Surface area and Volume	To have the knowledge of circle and terms related to it. (Radius, Diameter, Tangent, Chord, Secant, sector, segment etc To be able to solve the problems based on circles.
	Circles	To have the knowledge of different angles made in circle by different line segments.
	Heron's Formula	To have the knowledge of Heron's formula and its use to calculate the area of triangle.

Course	Content	Learning Outcomes
Unit I	1. Rational Numbers	<p>To have the concept of Rational numbers.</p> <p>Understanding of different properties of Rational numbers such as Closure, Commutative, Associative, Distributive and their use</p> <p>Solves the problems related to daily life situations involving rational numbers</p>
	<p>Linear Equation in one variable</p> <p>Data Handling</p>	<p>To have the concept of variable and coefficient.</p> <p>To be able to solve the equation with Linear expression on one side and numbers on other side.</p> <p>To be able to solve equation with Variables on both the sides.</p> <p>To be able to frame the linear equation from the given situation and be able to use the linear equations in day to day problems.</p> <p>To be able to reduce the equations to simpler and linear form.</p> <p>Solves the puzzles and daily life problems using variables.</p> <p>To have the understanding of raw data and grouped data.</p> <p>To develop the skill of Organizing and Grouping the Data to draw meaningful inferences.</p>
Unit II	<p>Data Handling</p> <p>Understanding</p> <p>Quadrilaterals</p> <p>Practical Geometry</p>	<p>To be able to represent the given Data in different graphical forms (Pictograph, Bar graph , Double Bar graph, Circle graph, Histogram)</p> <p>To have conceptual understanding of random experiments and probability.</p> <p>To be able to represent day to day life situations graphically.</p> <p>To develop conceptual understanding of polygons (convex and concave.) and their classification</p> <p>To develop conceptual understanding of Angle-sum property of polygons and solves the problems based on angle sum property.</p> <p>To develop conceptual understanding of different kinds of Quadrilaterals (trapeziums, kite, parallelogram, rhombus rectangle, square)</p> <p>To be able to know the importance of quadrilaterals in the environment.</p> <p>To be able to construct unique quadrilaterals within the different given measurements.</p> <p>To have the understanding of the situations wherein the quadrilaterals can and cannot be constructed.</p>

Term 1 st	<p>Square and Square Roots</p> <p>Cubes and Cube Roots</p> <p>Comparing Quantities</p>	<p>To be able to guess the perfect squares without calculations.</p> <p>To develop the understanding of different properties and patterns of square numbers.</p> <p>To be able to construct Pythagorean triplet with given one number.</p> <p>To be able to find square root by different methods (repeated subtraction, prime factorization, division Algorithm).</p> <p>Applications of square and square roots.</p> <p>To be able to relate the content with different solids in the immediate environment,</p> <p>To have the knowledge of Hardy—Ramanujan numbers.</p> <p>To have the concept of Cube and Cube Roots.</p> <p>To be able to find the cube root of perfect cubes through factorization and estimation.</p> <p>To be able to guess the nearest cube and cube root of a number.</p> <p>To be able to compare quantities in terms of their ratios and percentages.</p> <p>To have conceptual understanding of percentage profit, percentage loss, discount, VAT.</p> <p>To able to calculate cost price, selling price, profit, loss, discount, VAT when other parameters are given.</p> <p>To have conceptual understanding of Compound Interest and be able to calculate it using formula and without using formula. To be able to find the solution of the life related word problems.</p>
Unit III	<p>Exponents and powers</p> <p>2. Direct and inverse proportion</p> <p>Algebraic expressions and Identities</p>	<p>To have the knowledge of exponents and powers.</p> <p>To be able to express very small and very large numbers in standard form.</p> <p>To develop conceptual understanding of direct and inverse proportions.</p> <p>To be able to solve day- to- day problems using direct and inverse proportions.</p> <p>To have the concept of different kinds of expressions e.g. language, mathematical and algebraic etc.</p> <p>To be able to operate algebraic expressions.</p>
Term II	<p>Algebraic expressions and Identities</p> <p>Mensuration</p> <p>Factorization</p> <p>Introduction to Graphics</p>	<p>To be able to use the identities in problem solving</p> <p>To be able to construct the algebraic expressions for various expressions.</p> <p>To have the Conceptual understanding of formulas used to find out the area of different figures.</p> <p>To have the skill of finding the area of different type and size of Geometric shapes (rectangle, square, triangle, parallelogram, circle, trapezium, rhombus and other polygons).</p> <p>To have the Conceptual understanding of surface area of cube, cuboid and cylinder and their calculations.</p> <p>To have the Conceptual understanding of volume of cube, cuboid and cylinder and their calculation.</p> <p>To have the concrete concept of Factorization.</p> <p>To be able to factorize algebraic expressions by different Methods. (Using identities, splitting middle term and by regrouping the terms)</p> <p>To be able to divide a polynomial by another polynomial using division algorithm and factorization method.</p> <p>To be able to read and represent the data through Bars, Pie, Histogram, line Graph;</p> <p>To have the understanding of importance of graphs</p>

Course	Contents	Learning Goals
Unit I	Integers	Conceptual understanding of Integers and their representation on number line. To have the concept of properties like Closure, commutative, associative and distributive properties and their application in operations.
	Fractions and Decimals	To be able to concretise the concept of fractions by solid operations. To have the concept of fractions as decimals To be able to operate fraction & fraction, fractions & integers. To be able to perform operations on decimals. To be able to compare decimals and fractions.
Unit II	Data Handling	To have the Skill of collecting, recording & organizing data and representing it graphically. To be able to Calculate Mean, Mode and Median of data and understanding their applications in day to day life. To have the Conceptual understanding of probability and its use.
	Simple Equations	To have the concept and understanding of equations. To have the ability to frame linear equations from statements and their solutions. To be able to apply simple equation in day to day life.
	Lines and Angles	To have the Conceptual understanding of point, line, line segment and the plane.
Term I	Lines and Angles	To have the knowledge of different types of angles and their identification and importance in the surroundings. To have the knowledge of transversal of parallel lines and properties of corresponding angles, alternate interior angles and interior angles on the same side of a transversal.
	The Triangle and its properties.	To have the conceptual understanding of triangle and its elements. To have the conceptual understanding of exterior angle of a triangle and its property. Angle sum property of a triangle and its application to find some unknown angles.
		To have the concept of altitude and perpendicular in a triangle. Right angled triangles and Pythagoras property and its application in the day to day life
	Rational Numbers	To have the conceptual understanding of rational numbers and their need. To be able to compare of rational numbers and their representation of a number line. To be able to Identify rational numbers between two given rational numbers. (using given method) Operation on rational numbers. To have the understanding os role of identities in the operation of rational numbers.

Unit III	Congruence of Triangles	<p>To have the conceptual understanding of congruency in plane figures, line segments, angles and triangles.</p> <p>To have the knowledge of Criteria for congruence of triangles (SSS, SAS, ASA, RHS).</p> <p>To have the knowledge of importance of congruency.</p>
	Comparing quantities	<p>To have the conceptual understanding of ratio, proportion & percentage and their conversion with each other.</p> <p>To be able to convert fractional numbers to percentage and vice versa.</p> <p>To have the concept of buying, selling, profit and loss and their calculation.</p> <p>To have the concept of simple interest and its application.</p>
	Perimeter and Area.	To have the understanding of perimeter and be able to calculate the perimeter of different figures
Term II	Perimeter and Area.	<p>To have the conceptual understanding of the area and of the different shapes and its application in the field. (Geoboard may help)</p> <p>Project: A record of the perimeters and area of classrooms, Playground, Office room etc. be put on a chart.</p>
	Practical Geometry	<p>To be able to construct a line parallel to a give line.</p> <p>To be able to construct triangles using different criterion (SSS, SAS, ASA, RHS).</p>
	Algebraic Expressions	<p>Formation of algebraic expressions from different situations.</p> <p>Addition and subtraction of algebraic expressions.</p>
	Exponents and powers	<p>Understanding of exponents and laws of exponents.</p> <p>Expressing large numbers in the standard form.</p>

Course	Contents	Learning Goals
Unit I	Whole Numbers	<p>To have the understanding of whole numbers and concept of predecessor and successor. (Addition and subtraction using number line concept)</p> <p>To have the understanding of division as repeated subtraction which also deals with the concept of division by zero (0) not applicable</p> <p>To have the understanding of Commutative, Associative and Distributive property and their uses in whole numbers.</p> <p>To be able to observe patterns to develop thinking and reasoning.</p>
	Playing with Numbers	<p>Formation of divisibility tests by examples of various numbers and their use.</p> <p>To have the understanding of Prime and Composite numbers by activities.</p> <p>To be able to carry concrete operations with TLM/SLM</p> <p>Understanding of factors and multiples,</p> <p>To have the concept of divisor and factor.</p> <p>Understanding of Prime factorization, L.C.M and H.C.F. Use of HCF and LCM in particular situations</p>
Unit II	Basic Geometrical Ideas	<p>Conceptual understanding of point, line, line segment and plane.</p> <p>Parallel lines and non-parallel lines and their application.</p> <p>Understanding of simple closed figures, sides, vertices and diagonals.</p> <p>To have the understanding of Interior and exterior parts of different figures.</p>
	Integers	<p>To have the understanding of integers using concept of temperature, buying and selling etc and their need.</p> <p>Representation of Integers on the number line.</p> <p>Addition and Subtraction of Integers and solve problems involving addition and subtraction of integers.</p>
Term I	Understanding Elementary Shapes	<p>Understanding of concepts; corners, faces, edges and shapes.</p> <p>Angles with their types</p> <p>To be able to measure the angles by protractor. Classification of triangles on the basis of angles and sides.</p> <p>To have the understanding of three dimensional shapes.</p>
	Menstruation	<p>Understanding of regions and boundaries of different shapes.</p> <p>Concept of perimeter and area. (Geoboard and other models may help to understand the concept well)</p>
		<p>Construction of formulas for the area of square and rectangle with application in the field. (Geoboard and other models may help to understand the concept well)</p> <p>To calculate the area and perimeter of floor of classroom, Surface area of book, Area of Veranda, play field etc</p>

Unit III	Fractions	To have the concept of fractions and their types.
		Representation of fractions on number line and comparison of fractions.
		Addition and subtraction of fractions and use of fractional numbers in money, length, temperature etc.
	Decimals	Understanding of decimals and types of decimals e.g like and unlike decimals. Understanding fraction as decimal
Term II	Algebra	Concept of variable through induction method.
		Use of variable and construction of expressions with variable.
		Concept of equation and its solution.
	Ratio and proportions	Understanding of Ratio, Ratio as a comparison of two numbers.
		Understanding of proportion and concept of unitary method. Compare qnty using ratio in different situations.
	Practical Geometry	Introduction to Geometrical instruments Use of geometrical instruments to construct circle and line segment
		Drawing of perpendicular bisector by paper folding activity. Concept of radius by paper folding activity.
		Use of ruler and compass to construct some angles known and unknown
		Demonstration and understanding of different angles in the surroundings and classification of angles.

Science 6th

Unit/ Term	Chapter Title	Learning Outcomes	Key Concepts (Syllabus)	Resources	Activities/ Assignments/ Projects
U1	1) Food Where does it come from?	<p>Make a list of food items and their ingredients.</p> <p>Parts of Plants used as Food .</p> <p>Make a list of food items and their sources(plants and animals)</p> <p>Identification of herbivores, carnivores and omnivores.</p>	<p>Different food items and their ingredients.</p> <p>Plants and animals as source of food.</p> <p>Edible parts of plant, animal products used as food</p> <p>Identification of herbivores, carnivores and omnivores.</p>	Examples of food from different parts of plants and food from animal sources.	<p>Activity: Make a list of food items given in Mid-Day Meal.</p> <p>Make a list of Plants found in your area which are eaten as food.</p>
	2) Components of Food.	<p>Conduct simple investigations to seek answers to queries ,e.g., What are the food nutrients present in animal fodder?</p> <p>Prepare a list of food items you consume which are rich in Carbohydrates, Proteins, Vitamins, fats and mineral</p> <p>The nails on your fingers, toes and hair on your head are pure proteins.</p> <p>Balanced Diet</p> <p>Diseases caused due to deficiency of vitamins/minerals.</p>	Source of proteins, vitamins, carbohydrates, fats and minerals. Functions of various components of food.	Mid Day Meal, Charts, pictures/films of children suffering from food deficiencies and disabilities.	<p>Activity: Simple test for starch, protein and fats.</p> <p>Balanced diet and its use.</p> <p>Project and Assignment: 1. Students to be asked to prepare their diet chart at home for a week.</p> <p>Prepare a list of food items you consume which are rich in Carbohydrates, Proteins, Vitamins, fats and mineral</p>

U2	4.Sorting materials into Groups.	separating materials in your classroom made of plastic, paper , iron etc materials as soluble, insoluble, transparent, translucent and opaque. selecting season appropriate fabrics	Materials and their properties. Classification of material on the basis of solubility and transparency. Importance of grouping of materials	Sharing of prior knowledge with parents and community. Materials, kit items.	.Project: Collect materials from your surroundings and group them on the basis of their solubility and transparency.
	5. Separation of Substances	Separating mixtures through different processes. Keeping water in a pot for whole day and explain why level of the water depleted in the pot. classifies materials, organisms and processes based on observable properties, e.g., materials as soluble, insoluble	Methods of Separating mixtures– handpicking , threshing, winnowing, sieving. Sedimentation, Decantation, filtration Evaporation with their explanation by local examples. Water as universal solvent. Saturated and unsaturated solutions with activity. Solute, solvent and solution.	Everyday experience	Group Work. Separate different mixtures like Muddy water; mixture of rice, sand and salt; mixture of water and sugar
T1	10. Motion and the measurement of substances	Need to measure distance (length). Measurement of length. Motion as change in position with time.	Different modes of transport. Elementary idea of motion/rest. Types of motion; Rectilinear and circular motion, periodic motion and rotatory motion. Concept of measurement, measurement of length (Standard Unit)	Everyday experience; equipment (scale etc.) to measure length. Stories for developing contexts for measuring distances.	Project: With the help of ruler, measure objects like Table, black board, legs of a chair and your class room.

	9 The Living Organisms & Their Surroundings	List the animals and their habitat found in your area. Adaptations of animals and plants with their habitats Plants and animals found in different habitats have different features.	Habitat and Adaptation, Terrestrial Habitats: Deserts, Mountain regions, Grasslands. Aquatic Habitats: Oceans, Ponds and Lakes. Characteristics of living beings.	Pictures of different animals. Recollection of diversity of living organisms and the habitat where they live Potted plants or seeds, pots, etc; thermometer, any water plants, any xerophytic plants, Information on desert and aquatic plants and animals.	Assignment: Write different types of plants with their common names found in your area living in different habitats.
	11. Light Shadow & Reflection	transparent, opaque and translucent objects. Formation of shadows; reflection of light from plane mirror	Concept of transparent, opaque and translucent objects. Concept of light and shadow. Mirrors and reflections,	Previous experience, candle/torch/lamp, white paper, cardboard box, black paper.	Activity 1. Reflection of light through plane mirror. Activity 2. Construction of pinhole camera.

	14 Water.	Water: one of the most important natural resource. Uses of water. Water cycle, transpiration vis-à-vis Evaporation. Rain water harvesting. makes efforts to protect wastage of water water cycle	Water and its uses in daily life. Misuses of water. Sources of water and conservation of the sources of water. Evaporation and condensation. Water cycle, transpiration vis-à-vis Evaporation. Rain water harvesting. (Brief)	Experience, newspaper reports.	Project. preparation of posters showing the misuses of water and the proper use of water. Project. Students to carry out a rally in the school vicinity to aware people about conservation of water preferably on World Water Day (22nd March) Project. Prepare a simple modal of rain water harvesting
U3	3 Fibre to Fabric	differentiates materials and organisms, such as, fibre and yarn	Concept of fibre, yarn and fabrics. Sources of fibre (Plant and Animals) Natural and synthetic fibres.	Samples of wool and silk; brief account of silkworm rearing and sheep breeding.	Project. Collection of natural and synthetic fibres found in your locality.
	6. Changes around us	physical and chemical changes. Changes as can be reversed or cannot be reversed	Examples of physical and chemical changes. Fermentation, reversible and irreversible- changes occurring in the environment.	Prior knowledge, kit items.	Assignment. Students to be asked to visit their kitchen and observe changes taking place and classify these changes into reversible & irreversible changes
	8 Body Movements	Drawing of labelled diagrams / flow charts of organisms e.g., joints why is movement of earthworm and fish different from a man.	Movements of the body parts, joints of human body. Fixed joints and moveable joints. Ball and socket joints, Pivotal joints and hinge joints. Movement of the earthworm and the fish	Observation of nature; model of skeleton, X-rays of arms or legs, chest, hips, jaws, vertebral column (could be given in the textbook	Project. collect old x-ray films and observe the structure of different joints. Ask your teacher for help & guidance

T2	12 Electricity and Circuits	Conductor, Insulator diagram: electric circuits	Concept of electric circuit. Parts of an electric cell and torch bulb and the functions of a switch. Electric conductors and insulators.	Torch: cell, bulb or LED, wires, key. Mica, paper, rubber, plastic, wood, glass metal clip, water, pencil (graphite), etc.	Project. Prepare an electric circuit consisting of a cell or battery, connecting wires, switch and bulb.
	15 Air Around us	Air and its uses. composition of air oxygen cycle	Air and its constituents. Importance of air constituents, concept of air pollution. Interdependence of plants and animals in oxygen cycle (brief Idea)., Wind energy (brief Idea).	Experience.	Project. Designing a model of wind mill. Discussion. Why do earthworms come out of the soil when it rains?
	7 Getting to Know Plants	Types of plants. draws labelled e.g., parts of flowers	Concept of herbs, shrubs and trees. Parts of the typical plants with their important functions. Identification of the different parts of the typical flower	Plants, flowers, blade, hand lens.	Activity. Study of any flower, counting number of parts, names of parts, cutting sections of ovary to observe ovules. Project. paste different types of the leaves on a chart. Project. Take a flower and study its different parts and draw the same on a chart.

	16 Garbage in, Garbage out	makes efforts to protect environment. Knowing polythene as a dangerous and harmful thing . concept of 3R's.	Concept of waste, types of waste, concept of 3R's. Recycling of paper. When waste is problem. Sources of waste, garbage, compositing. (brief Idea) Plastic and polythene and non-decomposable wastes.	Observation and experience.	<p>Assignment. Prepare handmade posters displaying the message of harmful effects of non-degradable wastes and paste them at visible places of the vicinity.</p> <p>Survey of solid waste generation by households; estimation of waste accumulated (by a house/ village/colony etc.) in a day, in a year; discussion on 'what is waste';</p> <p>Activity to show that materials rot in soil, this is affected by wrapping in plastics.</p>
	13 Fun with Magnets	Magnet and poles of magnet. Why does a freely suspended magnet align in a particular direction? using compass needle for finding directions	Concept of magnetism and uses of magnets. Poles of the magnet with their properties. Distinction between magnetic and nonmagnetic substances.	Magnet, iron pieces, iron filings, paper. Bar magnet, stand, thread, compass. Two bar magnets, thread, stand.	<p>Activity : To magnetize a piece of iron rod.</p>

<i>Unit / Term</i>	<i>Theme/ Sub-theme</i>	<i>Learning Outcomes</i>	<i>Key Concepts (Syllabus)</i>	<i>Resources</i>	<i>Activities/ Assignments/ Projects</i>
U-1	1 Nutrition in Plants	<i>Nutrition, Autotrophic and heterotrophic nutrition; parasites, saprophytes; photosynthesis.</i>	Nutrition and nutrients. Modes of nutrition in plants . Autotrophic and heterotrophic mode. Saprotrophic nutrition and Symbiosis . Activity: Collect some leaves of various shapes/ patterns and preserve them.	Coleus or any other plant with variegated leaves, alcohol, iodine solution, kit materials	<i>Need for light, green leaf for photosynthesis, looking at any saprophyte/parasite and noting differences from a green plant</i>
	2 Nutrition in animals	<i>Types of nutrition, nutrition in amoeba and human beings, Digestive system – human, ruminants; types of teeth; link with transport and respiration.</i>	Essential parts of human digestive system. Functions of various parts of elementary canal (Human Beings). Stepwise digestive process in human beings. Digestion in ruminants (Cow). Digestion in unicellular organisms (Amoeba) .	Model of human teeth, charts of alimentary canal, types of nutrition etc., chart and model of amoeba. The story of the stomach with a hole.	Activity: to prepare a chart of human digestive system. Group work : Prepare a dental formula on chart indicating the functions of different teeth. Activity: Students may be asked to prepare ORS (Oral Rehydration Solution) which is very important in case of excessive loss of water diarrhea <i>Effect of saliva on starch, permanent slide of Amoeba. Role play with children</i>
U2	3. Fibre to Fabric	<i>classifies materials and organisms based on properties/characteristics, e.g., plant and animal fibres explains processes and phenomena , e.g., processing of animal fibres</i>	Animal fiber, wool, silk, Rearing/breeding of sheep. Processing fiber into wool. Life history of silk moth.	Samples of wool and silk; brief account of silkworm rearing and sheep breeding	<i>Collection of different samples of woollen and silk cloth. Activities to differentiate natural silk and wool from artificial fibres.</i>

	8. Winds, Storms & cyclones	<i>relates processes and phenomena with causes, e.g., wind speed with air pressure;</i>	Concept causes and effects of wind-storm and cyclone. Effective safety measures against cyclone.	Experience; newspaper reports. Narratives/stories.	<i>Making wind speed and wind direction indicators. Activity to show "lift" due to moving air. Discussion on effects of storms and possible safety measures</i>
	4 Heat	<i>What kinds of clothes help us to keep warm? What is heat? What is the meaning of 'cool'/'cold' and 'warm' 'hot'?</i> <i>Heat flow; temperature</i>	Heat and temperature and their difference. Measurement of temperature, Use of clinical and lab thermometer. Transfer of heat through conduction, convection, radiation. Good and bad conductors of heat. Activity: Recording the body temperature of class mates	Potassium permanganate, metal strip or rod, wax, common pins, spirit lamp, matches, tumblers, Thermometer etc.	<i>Experiment to show that 'hot' and 'cold' are relative. Experiments to show conduction, convection and radiation</i>
T1	5 Acids, Bases & Salts	Acids, bases and salts <i>Classification of substances into acidic, basic and neutral; indicators.</i>	Acids, bases and salts.. Acid base indicators; General physical properties of acid and bases with examples .Neutralization (brief idea)	Common substances like sugar, salt, vinegar etc, test tubes, plastic vials, droppers, etc.	Activity: Check the acidic and basic nature of different fruit juices and sodium bicarbonate, soap solution using litmus paper
	10. Respiration in Organisms	<i>Why do we/animals breathe? Do plants also breathe? Do they also respire? How do plants/ animals live in water? Respiration in plants and animals.</i>	Respiration, Types and process of respiration/ Respiration, breathing (Differences). Respiratory system in human being. Role of Diaphragm, chest, lungs and ribs in breathing. Composition of inhale and exhale air. Exchange of gases in plants through stomata..	Lime water, germinating seeds, kit materials.	Activity/ Project: Observe and compare the X-ray chest of a normal person with a person who is chain smoker and enlist the findings <i>Experiment to show plants and animals respire; rate of breathing; what do we breathe out? What do plants 'breathe' out? Respiration in seeds; heat release due to respiration. Anaerobic respiration, root respiration</i>

	10 Motion & Time	<i>Appreciation of idea of time and need to measure it. Measurement of time using periodic events. Idea of speed of moving objects – slow and fast motion along a straight line</i>	Understanding of motion and rest. Motion and its types, measurement of speed and time and its SI units. Distance – time graph	Daily-life experience; metre scale, wrist watch/ stop watch, string etc	Assignment: Identify the types of motion in sewing machine. wing and ,march past of soldiers. Activity: Make a model of the sand clock.
	16 Water	Water as a natural resource. Importance of water for sustaining life. Sources of water. Water exists in various forms in nature. Water as universal solvent . Water cycle in nature. Water pollution, causes, effects and prevention. Scarcity of water and its effect on life. Desalination of sea water.	Water as a natural resource. Importance of water for sustaining life. Sources of water. Physical states of water. Water as universal solvent . Water cycle in nature. Water pollution, causes, effects and prevention. Hydroelectric power projects in J and K. portable water, physical properties of water. Salinity of sea water. Desalination of sea water.	Water exists in various forms in nature. Scarcity of water and its effect on life.	Project: Important canals and lakes in J and K. <i>Case study of people living in conditions of extreme scarcity of water, how they use water in a judicious way. Projects exploring various kinds of water resources that exist in nature in different regions in India; variations of water availability in different regions</i>
U-3	6 Weather, Climate and Adaptation	Weather and climate. adaptation of animals to different climates.	Distinguish between weather and climate. Wet and Hot climate. Humidity and rainfall. Activity: Discuss with your students the working of State Meteorological Department.	Data on earth, sun – size, distance etc, daily changes in temperature, humidity from the newspaper, sunrise, sunset etc	Project: Collect pictures and make a collage related to September 2014 flood in Kashmir and the cite the possible reasons of that flood <i>Graph for daily changes in temperature, day length, humidity etc.;</i>

	6. Physical & Chemical Changes	physical and chemical changes. Activity : prepare the crystals of common salt (NaCl) from brine using crystallization method.	Concept of physical and chemical change and their types viz. Galvanization, Rusting of iron and crystallization.	Common substances like sugar, salt, vinegar etc, test tubes, plastic vials, droppers, etc. Test tubes, droppers, common pins, vinegar, baking powder, CuSO ₄ , etc. Urea, copper sulphate, alum etc, beaker, spirit lamp, watch glass, plate, petridish etc.	<i>Testing solutions of common substances like sugar, salt, vinegar, lime juice etc. with turmeric, litmus, china rose. Activity to show neutralisation.</i> <i>Experiments involving chemical reactions like rusting of iron, neutralisation (vinegar and baking soda), displacement of Cu from CuSO₄ etc. Introduce chemical formulae without explaining them.</i> <i>Making crystals of easily available substances like urea, alum, copper sulphate etc. using supersaturated solutions and evaporation</i>
	17 Forests : Our Life Line	Natural Resources, forests, Interdependence of plants and animals in forests. Forests contribute to purification of air and water.	Forests as a natural resource, Food chain, forests as ecosystem. Soil erosion. Decomposers, Role of forest in preservation of flood. Maintaining balance of O ₂ and CO ₂ in atmosphere. Important forest products	Case material on forests, Films on wild life, TV programmes	<i>Case study of forests.</i>
T-2	9. Soil	Soil and its gradients. Soil profile and soil types. crops grown with types of soil , Soils in J and K. Soil erosion	Soil and its gradients. Soil profile and soil types. Properties of soil percolation, absorption, Soils in J and K. Soil erosion.	Data on earth	Assignment: Enlist the natural ways to enrich soil fertility. Activity: Find out the moisture content of soil sample
	11 Light	Reflection, certain surfaces reflect light. Real and virtual images. White light is composed of many colours. Rainbow	Proving rectilinear propagation of light. Reflection of light. Spherical mirrors and their uses. Lenses, Kinds of lenses and their uses.	Rubber/plastic tube/ straw, any source of light Glass/metal sheet/metal foil, white paper.	<i>Observation of the source of light through a straight tube, a bent tube. Observing reflection of light on wall or white paper screen. Open ended activities allowing children to explore images made by different objects, and recording observations. Focussed</i>

			Dispersion of light (Brief explanation) Formation of rainbow, Spectrum.	Convex/concave lenses and mirrors. Newton's disc	<i>discussions on real and virtual images. Making the disc and rotating it.</i>
10	Transportation in Animals & Plants	Herbs, shrubs, trees; Transport of food and water in plants; circulatory and excretion system in animals; sweating.dialysis	Transportation of material in plants. Transpiration and its importance. Circulatory system in man . process of blood circulation.. Blood pressure, heart beat and pulse . Excretion in animals (Unicellular and multicellular) Excretion in man. Different organs of excretion. Excretory system in humans , Dialysis..	Twig, stain; improvised stethoscope; plastic bags, plants, egg, sugar, salt, starch, Benedicts solution, AgNO ₃ solution	Translocation of water in stems, demonstration of transpiration, measurement of pulse rate, heartbeat; after exercise etc. Discussion on dialysis, importance; experiment on dialysis using egg membrane Activity: Show transpiration to the students by covering the leaf of live plant by transparent polythene . Functions of xylem and phloem Project: Teacher is advised to demonstrate the structure of; (1) Heart (2) Kidneys of sheep or ox by dissection
11	Reproduction in Plants	Reproduction and its need. asexual and sexual reproduction in plants, pollination - cross, self pollination; pollinators, fertilisation, fruit, seed.	Reproduction and its need. Main modes of reproduction in plants. Different methods of asexual reproduction. Vegetative propagation and its advantages. Sexual reproduction in plants (Brief) sexual parts in flower. Pollination and fertilization. Parts of typical seed (Gram Seed), Parts of typical fruit (Pea and mango)	Bryophyllum leaves, potato, onion etc.; yeast powder, sugar.	Study of tuber, corm, bulb etc; budding in yeast; T.S./ L.S. ovaries, w.m.pollen grains; comparison of wind pollinated and insect pollinated flowers; observing fruit and seed development in some plants; collection and discussion of fruits/seeds dispersed by different means. Activity: Study all parts of live flower Assignment : Ask students to collect different seeds

	12 Elec tric Cur rent & Circ uits	Electric current. Electric circuit symbols for different elements of circuit. Heating effect of current. Principle of fuse. A current-carrying wire has an effect on a magnet. A current-carrying coil behaves like a magnet. Working of an electric bell	Electric current. Electric circuit, heating and magnetic effects of current. Electric fuse and its principles. Electric bell and its working.	Cells, wire, bulb or LED, aluminum foil., compass, battery. Coil, iron nail. Electric bell	Drawing circuit diagrams. Activities to show the heating effect of electric current. Activity to show that a current-carrying wire has an effect on a magnet. Making a simple electromagnet. Identifying situations in daily life where electromagnets are used. Demonstration of working of an electric bell Activity: to make an electric fuse. Activity: precautions/safety measures while handling electric devices Project: Prepare an electromagnet
	18 Waste Water Story	Sewage; need for drainage/sewer systems that are closed.	Sources of water, defining wastewater or sewage, contaminants of waste water. Treatment of polluted water. Sanitation and some water borne diseases.	Observation and experience; photographs.	Survey of the neighbourhood, identifying locations with open drains, stagnant water, Tracing the route of sewage in your building. Project: Observe the sanitation pattern in the vicinity and advocate the reform

<i>Unit/ Term</i>	<i>Theme/ Sub-theme</i>	<i>Learning Outcomes</i>	<i>Key Concepts (Syllabus)</i>	<i>Resources</i>	<i>Activities/ Assignments/ Projects</i>
U-1	1 Micro-Organisms : Friend & Foe	Microorganisms and their classification. (Bacteria, Fungi, Protozoa, algae and viruses). , useful and harmful microorganisms. medicinal use – antibiotics, vaccine. Nitrogen fixing bacteria. Why do we add salt and sugar in pickles and murabbas?	Microorganisms and their classification. (Bacteria, Fungi, Protozoa, algae and viruses). Friendly microorganism (making curd and bread), commercial use of microorganisms- medicinal use – antibiotics, vaccine. Nitrogen fixing bacteria. Harmful microorganisms, (Diseases caused by microorganisms in plants, humans and animals). Food poisoning, Food preservation and its different methods, Nitrogen cycle (graphic)	Microscope, kit materials; information about techniques of food preservation	Assignment: Prepare a list of vaccines available in nearby hospital used to cure some common diseases in human beings like Cholera, tuberculosis, Small pox, hepatitis, polio. Observation of drop of water, curd, other sources, bread mould, orange mould under the microscope; experiment showing fermentation of dough – increase in volume (using yeast)
	15 Stars and the Solar System	Idea about heavenly bodies/celestial objects and their classification – moon, planets, stars, constellations. Motion of celestial objects in space; the solar system	Define universe, Astronomy, solar system, heavenly bodies, stars, Planets etc., How stars emit light, Light Year, Constellation, satellites, Moon, Formation of days and nights, Meteors and meteorites, Difference between stars and planets	Observation of motion of objects in the sky during the day and at night; models, charts, role-play and games, planetarium.	Project: Design and preparing models and charts of the solar system,
U-2	2 Coal & Petroleum	exhaustible and inexhaustible natural resources, etc Formation of coal and petroleum in nature. (fossil fuels?). Consequences of over extraction of coal and petroleum.	Natural resources (exhaustible/inexhaustible) Coal: Formation: types of coal. Constituents of natural gases and its uses. Important mineral resources in J & K.	Background materials, charts etc.	Activity : Prepare the list of various materials and classify them as exhaustible and inexhaustible natural resources / Natural & Man Made Project Work: Collection of five local minerals.

	3 Conservation of Plants & Animals	Conservation of biodiversity/wild life/ plants; zoos, sanctuaries, forest reserves etc. flora, fauna endangered species, red data book; endemic species, migration.	Deforestation, its causes. Effects of deforestation- (soil erosion, desertification). Conservation of forests, wild life. Biosphere reserves-its flora and fauna. Wild life sanctuaries of J & K. National parks of J & K. Recycling of paper (Encouraging students to use recycled paper). Endangered species and effect on J & K . Reforestation	Data and narratives on deforestation and on movements to protect forests. Films on wild life, TV programmes, case study with information on disappearing tigers; data on endemic and endangered species from MEF, Govt. of India, NGOs	Visit nearby forest area / wildlife sanctuary.
	5 Sound	Various types of sound; sources of sound; vibration as a cause of sound; frequency; medium for propagation of sound; idea of noise as unpleasant and unwanted sound and need to minimise noise, Loudness and pitch. Characteristics of vibration. (Amplitude, time period, frequency and velocity)	Vibration :Production of sound by the vibrations. Need of medium for propagation of sound. Sound produced by humans (Vocal cords) Hearing by ear. Loudness and pitch. Characteristics of vibration. (Amplitude, time period, frequency and velocity) Audible range for human ear. Noise and noise pollution and its effects, control	Daily-life experiences; kit items; musical instruments	Demonstrating and distinguishing different types (loud and feeble, pleasant/ musical and unpleasant / noise, audible and inaudible) of sound. Producing different types of sounds. using the same source. Identifying various sources of noise. (unpleasant and unwanted sound) in the locality and thinking of measures to minimise noise and its hazards (noise-pollution).
T1	16 The Cell	Cell structure, plant and animal cells, use of stain to observe, cell organelles – nucleus, vacuole, chloroplast, cell membrane, cell wall..	Cell structure, parts of a typical Plant/Animal cell as viewed through microscope, and their functions. Distinguish between plant and animal cell. Diversity in cell and common features in cell.	Microscope, onion peels, epidermal peels of any leaves, petals etc, buccal cavity cells, Spirogyra; permanent slides of animal cells.	Activity: Study the parts of microscope Use of a microscope, prepares slides of microorganisms; onion peel , human cheek cells ,etc., and describes their microscopic features.. draws labelled diagram/ flow charts, e.g., structure of cell,
	11.Material: Metals &Non Metals	Etal and Non-Metal, Physical properties of metals and nonmetals, Acidic and basic oxides, uses of metals and nonmetals in our daily life,	Physical properties of metals and nonmetals, Difference between metals and nonmetals., Acidic and basic oxides, uses of metals and nonmetals in our daily life, Mineral wealth of J and K, (Metallic and Non Metallic Minerals	Daily-life experience, kit items	Simple observations relating to physical properties of metals and non-metals, displacement reactions, experiments involving reactions with acids and bases. Activity : Burning of Magnesium Ribbon

	9 Force & Pressure	Force, Pressure, Application of force and pressure, Contact and non-contact forces. Do liquids exert equal pressure at the same depth?	Force and its applications in daily life, Effects of force(motion/shape), Contact and noncontact forces, Pressure, Atmospheric pressure, liquids and gases exert pressure	Daily-life experience, kit items Experimentation improvised manometer and improvised pressure detector.	<i>Observing and analysing the relation between force and motion in a variety of daily-life situations. Demonstrating change in speed of a moving object, its direction of motion and shape by applying force. Measuring the weight of an object, as a force (pull) by the earth using a spring balance.</i> <i>Observing the dependence of pressure exerted by a force on surface area of an object. Demonstrating that air exerts pressure in a variety of situations. Demonstrating that liquids exert pressure. Designing an improvised manometer and measuring pressure exerted by liquids</i>
	10 Reaching the Age of Adolescences	challenging myths and taboos regarding adolescence, etc exhibits values of honesty, objectivity, cooperation, freedom from fear and prejudices, Adolescence, Puberty, Changes in puberty, Role of hormones in reproductions, Reproductive phases of life in humans, sex determination, Reproductive health. Say no to drugs.	Adolescence, Puberty, Changes in puberty, Role of hormones in reproductions, Reproductive phases of life in humans, sex determination, Reproductive health. Say no to drugs.	Counselors, films, lectures.	Discussion with parents on secondary sexual characters.
U-3	7. Combustion & Flame	Combustion, flame All fuels release heat on burning. Fuels differ in efficiency, cost etc. Natural resources are limited. Burning of fuels leads to harmful by products., investigations to seek answers to queries ,e.g. What are the conditions required for combustion. structure of flame,	Combustion. Necessities for combustion and types. Calorific value and ignition temperature. Fuel and its types, CNG as a fuel, Characteristics of a good fuel. Harmful effects of fuel burning. Global warming, Flame-its zones, Flammable and inflammable substances, Extinguishing of fire and extinguishers. Acid rain	"The Chemical History of a Candle", by M. Faraday, 1860. Collecting information from home and other sources.	Testing various materials – for action of water, reaction on heating, effect of flame, electrical conductivity, thermal conductivity, tensile strength Experiments with candles.

	17 Some Natural Phenomenon	Natural Phenomena Rain, thunder and lightning, Lightning conductors, Lightening safety. constructs models using materials from surroundings and explains their working , e.g. , ektara, electroscope, fire extinguisher, etc. discusses and appreciates stories of scientific discoveries	Concept of some natural phenomena (Lightning, charging by rubbing, interaction of charges, transfer of charges) Lightning conductors, Lightening safety. Structure of lithosphere. Earthquakes) Richter scale, Seismograph, Do's and don'ts during earthquakes	Articles on clouds and lightning; kit items Observation of motion of objects in the sky during the day and at night; models, charts, role-play and games, planetarium. Earthquake data; visit to seismographic centre	Experiments with comb and paper to show positive and negative charge. Discussion on lightning conductor. Observing and identifying some prominent stars and constellations. constellations, etc. activities to explore stable and unstable structures.
	6 Food Production & Managements	Crop production: Soil preparation, selection of seeds, sowing, applying fertilizers, irrigation, weeding, harvesting and storage; nitrogen fixation, nitrogen cycle., kharif and rabi crops; increasing crop production;using appropriate minerals for various purposes	Agriculture and basic products. Main crops of J and K. Various practices in agriculture. (Nursery development, weeding, harvesting, seeding, Transplantation, Winnowing storage, crop improvement, plant breeding and crop rotation. Multiple cropping) Pests and weeds, Dairy industry. Domestication of animals. Poultry, Pisciculture and apiculture.	Interaction and discussion with local farmers about farming and farm practices;	visit to cold storage, go- downs; visit to any farm/ nursery/ garden.
T-2	12. Light	Light, Laws of reflection., Characteristics of image formed with a plane mirror. Regular and diffused reflection. Reflection of light from an object to the eye. Multiple reflection. Dispersion of light. Structure of the eye. Lens becomes opaque, light not reaching the eye. Visually challenged use other senses to make sense of the world around. Alternative technology	Definition of light. Reflection and laws of reflection (Activity based) Regular and diffused reflection, Human eye, (brief) Care of eyes, Braille System. Dispersion-spectrum	Mirror, source of light ray source (mirror covered with black paper with a thin slit). Plane glass, candle, scale. Mirrors and objects to be seen. Plane mirror, water. Model or chart of the human eye. Experiences of children; case histories. Samples of Braille sheets	Exploring laws of reflection using ray source and another mirror. Locating the reflected image using glass sheet and candles. Observing multiple images formed by mirrors placed at angles to each other. Making a kaleidoscope. Observing spectrum obtained on a white sheet of paper/wall using a plane mirror inclined on a water surface at an angle of 45°. Observing reaction of pupil to a shining torch. Demonstration of blind spot. Description of case histories of visually challenged people who have been doing well in their studies and careers. Activities with Braille sheet

		available. Role of nutrition in relation to blindness			
	4. Reproduction in Animals	Reproduction and modes of reproduction. Sexual reproduction and endocrine system in animals, secondary sexual characters, reproductive health; internal and external fertilisation; explains processes of reproduction in human and animals; , Asexual reproduction, budding, Binary fission,	Reproduction and modes of reproduction. Sexual reproduction (Animals) , Reproduction types in animals, male and female organs of reproduction, fertilization, internal/external with examples, Zygote formation, and development of Embryo up to fetus formation. Define fetus, Embryo. Viviparous, and oviparous, Asexual reproduction, budding, Binary fission,	Counsellors, lectures.	Discussion with parents on secondary sexual characters, reproductive health
	13 Pollution of Air & Water	processes and phenomenon with causes ,e.g., smog formation with the presence of pollutants in air; deterioration of monuments with acid rain, etc. applies learning of scientific concepts in day-to-day life, e.g., purifying water; segregating biodegradable and non-biodegradable wastes. suggesting ways to cope with environmental hazards, etc	Air and its constituents, Air pollution, its causes and effects, Greenhouse effect, Global Warming, prevention of air pollution, potable water, water pollution and its causes, purification of water,	Description of some specific examples of extremely polluted rivers	Activity : Take an earthen pot ,some pebbles & sand. Design a small-scale filtration plant that you could use to clean muddy water. Discussion on other methods of water purification Project: A field visit to nearby water treatment plant.
	9. Chemical Effects of Electric Current	liquids as electrical conductors and insulators. chemical effects of electric current, Basic idea of electroplating	Electrolyte and non- electrolyte, Conduction of current through liquids, Conductors and insulators, Chemical effects of current. LEDS, Electrodes, Anode, Cathode, Ionization, Electroplating, process of electroplating	Rubber cap, pins, water, bulb or LED, cells, various liquids. Carbon rods, beaker, water, bulb, battery. Improvised electrolytical cell, CuSO ₄	Activity to study whether current flows through various liquid samples (tap water, salt solution, lemon juice, kerosene, distilled water if available). Deposition of Cu from copper sulphate solution. Simple experiment to show electroplating.
	14. Friction	Friction – factors affecting friction, sliding and rolling friction, moving; advantages and disadvantages of friction for the movement of automobiles, airplanes and boats/ships; increasing and reducing friction.	Friction, Definition, And activity to show friction, Types of friction, laws of limiting friction, Causes of friction, examples in our daily life, friction due to liquids and gases, (Water-air), friction is necessary evil, Disadvantages of friction, methods to reduce friction (lubrication, Soap, solution, polishing etc.) Use of ball bearing	Various rough and smooth surfaces, ball bearings.	Demonstrating friction between rough/smooth surfaces of moving objects in contact, and wear and tear of moving objects by rubbing (eraser on paper, card board, sand paper). Activities on static, sliding and rolling friction. Studying ball bearings. Discussion on other methods of reducing friction and ways of increasing friction.

<i>Unit / Term</i>	<i>Theme/ Sub-theme</i>	<i>Learning Outcomes</i>	<i>Key Concepts (Syllabus)</i>	<i>Resources</i>	<i>Activities/ Assignments/ Projects/Experiments.</i>
U-I	11 The Fundamental Unit of Life	Cell as a basic unit of life; Prokaryotic and eukaryotic cells, unicellular and multicellular organisms; cell membrane and cell wall, cell organelles: chloroplast, mitochondria, vacuoles, ER, Ribosomes: Golgi Apparatus;	What are living organisms made up of? Structural organization of a cell. Plasma membrane, its relationship with isotonic, hypotonic hypertonic solutions, Osmosis: Plasmolysis and deplasmolysis. Nucleus-prokaryotic and eukaryotic cells; cytoplasm. Cell organelles-endoplasmic reticulum, Golgi apparatus, Lysosomes, Mitochondria, Plastids and Vacuoles.	www.smartlearnin.com Permanent slides	1. To study the various parts of compound Microscope. 2. To prepare and study plant cell from Onion peel and animal cell from cheek cells. 3. To study different types of cell from permanent slides/ charts/models of bacterial cell, plant cell and animal cell.
	7 Matter in our Surroundings	Matter: Anything that occupies space and has mass is matter. States: Solid, liquid and gas; change of state – melting, freezing, evaporation, condensation, sublimation.	Physical nature of matter. Characteristics of particles of nature. States of matter (Solid, Liquid and Gas) Can you bring about a change in the state of matter? Evaporation. A brief introduction about two more states of matter- plasma and Bose-Einstein condensate (Non-evaluative)	www.smartlearnin.com Wax, water, ice, oil, sugar, camphor/ ammonium chloride/ naphthalene	Conversion of ice to water and water to water vapours Observe effect of heat on each of the resources. (Teacher with students to perform the experiment for camphor, ammonium chloride and naphthalene.)

U2	1 Motion	<p><i>Relation of movement with time and distance. Effects of increasing or decreasing speed on distance covered by an object. Explaining motion of an object through graphs. equations of motion by graphical method:-</i></p> <p>i) $v=u+at$ ii) $S=ut+at^2$ iii) $v^2-u^2=2as$,</p>	<p><i>Motion is relative, need of origin (reference point) for describing position of an object, distance and displacement, uniform and non-uniform motion along a straight line, speed, velocity and acceleration, distance time and velocity time graphs for uniform and uniformly accelerated motion, equations of motion by graphical method:-</i></p> <p>i) $v=u+at$ ii) $S=ut+at^2$ iii) $v^2-u^2=2as$, Elementary idea of uniform circular motion.</p>	<p><i>Experiences from daily life</i></p> <p>www.smartlearnin.in</p>	<p>1. To plot a distance- time graph from a given data and calculate speed from it.</p> <p>2. To plot a velocity- time graph from a given data and calculate acceleration from it.</p> <p>3. To measure the temperature of hot water as it cools and plot a temperature – time graph</p> <p>1. To study the motion of a body along an inclined plane.</p>
	2 Force & Laws of Motion	<p><i>Force and its relation to motion, balanced and unbalanced force inertia of a body, inertia and mass, momentum, force and acceleration. Elementary idea of conservation of momentum, action and reaction forces Relating Newton's laws of motion to daily life experiences.</i></p>	<p><i>Force and its relation to motion, balanced and unbalanced force, concept of inertia and its relation with mass, Newton's law of motion, momentum, force and acceleration, elementary idea of conservation of momentum, Action and reactions force.</i></p>	<p><i>Historical accounts; Experiences from daily life; wooden and glass boards, sand, balls; wooden support, some coins (say of Rs. 2 or Rs. 5); tumbler; balloons etc.</i></p> <p>www.smartlearnin.in</p>	<p><i>Demonstrating the effect of force on the state of motion of objects in a variety of daily-life situations. Demonstrate the change in direction of motion of an object by applying force.</i></p> <p><i>Equal and opposite forces</i></p> <p><i>To demonstrate</i></p> <p><i>Equal and opposite forces</i></p>
	14 Why do we Fall Ill	<p><i>What is health and disease: various causes of diseases Diseases caused by microbes and their</i></p>	<p><i>Health and its failure, Disease and its causes-Acute and chronic disease; causes of diseases, Infectious and Non-infectious diseases, Infectious diseases-Agents Means of Spread. Organ</i></p>	<p>www.smartlearnin.in</p> <p><i>Newspaper articles, information from health centres,</i></p>	<p><i>Surveying neighborhood to collect information on disease occurrence and pattern.</i></p> <p><i>Studying the life cycle of the mosquito and malarial parasite. Discussion on how malaria is</i></p>

		<p>prevention – Typhoid, diarrhoea, malaria, hepatitis, rabies, AIDS, TB, polio; pulse polio programme.</p> <p>How to remain healthy?</p>	<p>specific and tissue specific manifestation.</p> <p>Principle of treatment and prevention.</p>	<p>photographs of various causal organisms.</p> <p>Photographs, permanent slides of bacteria.</p>	<p>spreading, how to prevent mosquito breeding.</p>
T1	8 Is Matter Around Us pure	<p>Elements, compounds and mixtures.</p> <p>Heterogeneous and homogeneous mixtures.</p> <p>Colloids and suspensions.</p> <p>Discuss: Air is a mixture' (Mixture of what? How can these be separated?), 'Water is compound' and 'Oxygen is an element'.</p>	<p>Mixture and its types, solution and its properties.</p> <p>Concentration of solution and how it is expressed.</p> <p>Colloidal solution and its properties, suspension and its properties, separating the components of mixture by different methods:- Evaporation, Centrifugation.</p> <p>by using separating funnel, sublimation, simple distillation, fractional distillation, chromatography, separation of components of Air.</p> <p>Physical And chemical changes.</p> <p>Types of pure substances (Elements and compounds)</p> <p>Difference between compound and mixture.</p>	<p>www.smartlearnin g.in</p> <p>Samples of commonly available elements, compounds and mixtures. Samples of solution, suspension and colloid.</p>	<p>Discussion: Air is a mixture' (Mixture of what? How can these be separated?), 'Water is compound' and 'Oxygen is an element'.</p> <p>1. To separate the contents of mixture</p> <p>i) by sublimation.</p> <p>ii) by crystallization</p> <p>iii) With the help of a separating funnel.</p> <p>To carry out the following processes, record observations and classify them into physical and chemical changes.</p> <p>i) Melting of ice.</p> <p>ii) Adding pieces of iron to copper sulphate solution in a beaker</p> <p>iii) Burning magnesium in air</p> <p>iv) Dissolving common salt in water.</p> <p>v) Adding zinc pieces to dilute sulphuric acid.</p> <p>3. To prepare</p> <p>i) A true solution of sugar and alum.</p> <p>ii) A suspensional chalk powder and fine sand in water.</p> <p>iii) A colloidal solution of starch in water and distinguish between these on the basis of</p> <p>a) Filtration criterion and</p> <p>b) Stability.</p>

					<p><i>Project work.</i></p> <p><i>To study the solubility of three different available substances in water at different temperature and determine</i></p> <p><i>i) Effect of temperature on solubility.</i></p> <p><i>ii) Magnitude of solubility at different</i></p> <p><i>iii) Orders of solubility.</i></p>
	<p>3 Work , Energy & Power</p>	<p><i>Scientific concept of work .</i></p> <p><i>Work done by a force, energy, power; kinetic and potential energy; law of conservation of energy.</i></p>	<p><i>Scientific concept of work, work done by constant force, concept of positive and negative work, energy and its various forms, potential and kinetic energy, law of conservation of energy, Definition of power and its unit.</i></p>	<p>www.smartlearnin.com</p> <p><i>Rop, board or plank, wooden block, ball, arrow, bamboo stick, spring, etc.</i></p>	<p><i>Experiments with pendulum.</i></p> <p><i>Experiments with spring.</i></p> <p><i>ii) Work done in lifting a weight.</i></p> <p><i>iii) Work done by moving body.</i></p> <p><i>iv) Work done by compressed spring on a raised body.</i></p> <p><i>2. To calculate the work done by a force using a simple toy cart.</i></p>
	<p>12 Tissues</p>	<p><i>Tissues, organs, organ systems, organism.</i></p> <p><i>Structure and functions of animal and plant tissues (four types in animals; meristematic and permanent tissues in plants).</i></p> <p><i>Observation of model of human body to learn about levels of organization – tissue, organ, system, and organism,</i></p>	<p><i>Types of plants and animal tissues. Meristematic, permanent tissue and their types, (parenchyma, collenchymas, Sclerenchyma, Xylem and Phloem with their elements). Animal tissues, Epithelial tissue, connective tissue, muscular tissue and nervous tissue.</i></p>	<p>www.smartlearnin.com</p> <p><i>Permanent slides, model of the human body.</i></p>	<p><i>Observation of model of human body to learn about levels of organization – tissue, organ, system, and organism, observe blood smears (frog and human), cheek cells, onion peel cell, Spirogyra, Hydrilla leaves (cyclosis).</i></p> <p><i>To study different types of plant tissues from permanent slides/charts/models of Parenchyma, areenchyma, Collenchyma, Sclerenchyma, Xylem and Phloem.</i></p> <p><i>5. To study different types of animal tissues from permanent slides/charts/models of Squamous, Cuboidal, Columnar</i></p>

					<i>(Ciliated), Stratified (Squamous) Epithelial tissues, Adipose tissue, Tendon, Hyaline cartilage, Erythrocytes, Leucocytes, Striated muscle, smooth muscle, Cardiac muscle and Neuron.</i>
	15 Natural Resource	<i>Resource, Natural resources, Importance of air, water and soil, Air for respiration, for combustion, for moderating temperatures, movements of air and its role in bringing rains across India. Air, water and soil pollution (brief account). Holes in ozone layer and the probable damages. Bio-geo chemical cycles in nature: water, oxygen, carbon, nitrogen.</i>	<i>Resources – air, water and soil; Air pollution, Rain, water, Water pollution, Mineral riches in the soil. Soil pollution ; Biogeochemical cycles-water cycle, oxygen cycle, carbon cycle and Nitrogen cycle. Green house effect, Ozone layer depletion (brief idea)</i>	www.smartlearnin g.in <i>Daily newspapers, magazines and other reading materials. Weather reports over a few months and air quality reports over the same time period. Case study material</i>	<i>Case Study: overview of inter relationship of air, water, soils, forests. Debates on these issues using resources mentioned alongside, visit to/ from an environmental NGO; discussion.</i>
U3	5. Floatation	<i>Thrust and pressure. Archimedes' principle, buoyancy, elementary idea of relative density and specific gravity.</i>	<i>Thrust and pressure, Buoyancy, Condition of Floatation, Archimedes principle and its applications, elementary idea of relative density and specific gravity.</i>	www.smartlearnin g.in <i>Cycle pump; board pins, bulletin board, mug, bucket, water etc.</i>	<i>Experiments with floating and sinking objects. To determine the density of a solid (denser than water) by using a spring balance and measuring cylinder. To verify Archimedes principle.</i>
	9 Atoms & Molecules	<i>Particle nature, basic units: atoms and molecules. Law of constant proportions.</i>	<i>Laws of chemical combinations:- law of conservation of mass, Law of constant proportion, Numerical problems on laws of chemical combination, Atom, Atomic mass,</i>	www.smartlearnin g.in <i>Kits for making molecular models.</i>	<i>Discussion on the fact that elements combine in a fixed proportion through discussion on chemical formulae of familiar compounds.</i>

		<p><i>Atomic and molecular masses.</i></p> <p><i>Mole concept, Relationship of mole to mass of the particles and numbers. Valency. Chemical formulae of common compounds.</i></p>	<p><i>Molecules (Molecules of elements and molecules of compounds).</i></p> <p><i>Ions (simple and polyatomic), chemical formulae, writing chemical formulae of simple compounds.</i></p> <p><i>Molecular mass and mole concept, formula unit mass, numerical problems on mole concept.</i></p>	<p><i>Historical account including experiments of Lavoisier and Priestley.</i></p>	<p><i>To experimentally prove the law of conservation of mass.</i></p> <p><i>Project Work</i></p> <p><i>To develop a low cost model for writing chemical formulae.</i></p>
	<p><i>16 Improvement in Food Resources</i></p>	<p><i>What do we do to get higher yields in our farms?</i></p> <p><i>Plant and animal breeding and selection for quality improvement, use of fertilizers, manures; protection from pests and diseases; organic farming.</i></p>	<p><i>Improvement in crop yielding variety improvement, crop production management- Nutrient management (Macro and Micro nutrient). Manures, fertilizers, Irrigation; cropping pattern; crop protection management, storage of grains, Animal husbandry-cattle farming, Fish production, Bee keeping.</i></p>	<p>www.smartlearnin g.in</p> <p><i>Visit to any fish/ bee/dairy/cattle etc farms; data showing harmful effects of insecticides</i></p>	<p><i>Visit a weed infested field in the month of July and August and make a list of the weeds and insect pests in the fields.</i></p> <p><i>4. Make a herbarium of Cereals, Pulses and oil seeds and identify the seasons of their sowing.</i></p> <p><i>5. Collect and preserve insects like Grasshopper, Dragon flies and butterflies.</i></p>
	<p><i>10. Diversity in Living Organisms</i></p>	<p><i>Diversity of plants and animals – basic issues in scientific naming, Basis of classification, Hierarchy of categories/groups, Major groups of plants (salient features) (Bacteria, Thallophyta, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms). Major groups of animals (salient features) (Nonchordates up to</i></p>	<p><i>Basis of classification. Classification and evolution; the hierarchy of categories/groups. Characteristics of monera, protista, fungi, plantae and animalia. Major groups of plantae and animalia, Nomenclature (Binomial)</i></p>	<p>www.smartlearnin g.in</p>	<p><i>1. Collect and prepare the specimen of Lichens, Marchantia, Ferns, Cacti and other plants in your Locality.</i></p> <p><i>2. Visit to a botanical garden/locality and study the local flora.</i></p> <p><i>3. Visit to lake/pond and study various aquatic plants.</i></p> <p><i>4. Prepare culture of Algae, Amoeba, Paramecium, Euglena.</i></p> <p><i>5. Preservation of local fish varieties (Schizothorax and Cyprinus caprio)</i></p>

T2		<i>phyla and Chordates up to classes).</i>			
	17 Prevention of Drug Abuse & Sexuality Transmitted Diseases	<p><i>Adolescents and substance abuse:- their effects and therapeutic effects:</i></p> <p><i>Introduction, withdrawal symptoms and reasons of drug abuse, Signs & symptoms of drug addiction, human brain and drug addiction, different types of drugs, Alcohol, Tabacco, Opioids, Cannabionoids, Coca Akeloid or Cocaine, Therapeutic measures against addiction.</i></p> <p><i>Sexually Transmitted disease with special reference to AIDS. Introduction, modes of transmission, effects and prevention; symptoms of AIDS, diagnosis of HIV infection, Prevention of spread of disease, social stigma associated with AIDS.</i></p>	<p><i>Adolescents and substance abuse:- their effects and therapeutic effects:</i></p> <p><i>Introduction, withdrawal symptoms and reasons of drug abuse, Signs & symptoms of drug addiction, human brain and drug addiction, different types of drugs, Alcohol, Tabacco, Opioids, Cannabionoids, Coca Alkaloid or Cocaine, Therapeutic measures against addiction.</i></p> <p><i>Sexually Transmitted disease with special reference to AIDS. Introduction, modes of transmission and prevention, AIDS: causes, affects on person and symptoms of AIDS, diagnosis of HIV infection, Prevention of spread of disease, social stigma associated with AIDS.</i></p>	<p>www.smartlearnin.g.in</p> <p><i>Newspaper articles, information from health centres, photographs of various causal organisms. Photographs, permanent slides of bacteria. Newspaper reports on HIV/AIDS.</i></p>	<p><i>Seminar: Request BMO to send a team of doctors for providing information regarding Drug Abuse & Sexuality Transmitted Diseases Discussion with mother and father.</i></p>

	4 Gravitation	Gravitation; universal law of gravitation, force of gravitation of the earth (gravity), acceleration due to gravity; mass and weight; free fall.	Gravity and gravitation, universal law of gravitation and its importance, acceleration due to gravity, relation between acceleration due to gravity (g) and gravitational constant (G), Difference between mass and weight, motion of objects under the influence of gravity (use of (g) in equations of motion.	www.smartlearnin.com Spring balance Daily life Experiences	Analysis of motion of ball falling down and of ball thrown up. Measuring mass and weight by a spring balance To study the change in frequency of a simple pendulum due to change in length of a pendulum. To demonstrate the phenomenon of weightlessness.
	6. Sound	Sound, Which sound is pleasant, Nature of sound and its propagation in various media, speed of sound, range of hearing in humans; ultrasound; reflection of sound; echo and sonar. Structure of the human ear (auditory aspect only).	Nature of sound and its propagation in various media, necessity of material medium for propagation of sound, speed of sound, reflection of sound, Echo, range of hearing in humans, infrasonic and ultrasonic sounds; Sonar: structure of human ear (auditory aspect only).	www.smartlearnin.com String, ball or stone as bob, water tank, stick, slinky, rope, echo tube, rubber pipe etc. Model or chart showing structure of the ear.	Activity: Model or chart showing structure of the ear. Experiments: To verify laws of reflection of sound. 4. To study the oscillations of a i) Simple Pendulum. ii) Tuning Fork. iii) Stretched string. iv) Slinky.
	10. Structure of Atom	Atoms are made up of smaller particles: electrons, protons, and neutrons. These smaller particles are present in all the atoms but their numbers vary in different atoms. Isotopes and isobars. Brief historical account of Rutherford's experiment. Bohr's model of atom (A brief description). Electronic concept of valency. Atomic number and mass number.	Charged particle of matter (Electrons and protons). Thomson model of Atom and its drawbacks. Rutherford's model of Atom and drawbacks. Bohr's model of atom (A brief description). Neutral particle of Matter (Neutron). Distribution of electrons in various orbits (shells). Electronic concept of valency. Atomic number and mass number. Isotopes and isobars.	www.smartlearnin.com Charts, films etc.	To prepare a chart depicting the distribution of electrons in various orbits (shells) around the nucleus for elements with atomic no.'s 1 to 20 according to Bohr's model of Atom.

Class	Subject	Total No. of Chapters	UNIT I 10% Content Load	UNIT II 20% Content Load	TERM FIRST 20% Content Load	Up to Term First Total content Load 50%	Unit III 15% content Load	TERM SECOND 35% content Load	Total content Load for Term I & Unit III 50%	Grand Total
6th	History	10	01	02	02	05	02	03	05	10
	Civics	09	01	02	02	05	01	03	04	09
	Geography	09	01	01	02	04	01	04	05	09
Total		28	03	05	06	14	04	10	14	28
7th	History	10	01	02	02	05	02	03	05	10
	Civics	08	01	01	02	04	01	03	04	09
	Geography	10	01	02	02	05	01	04	05	09
Total		28	03	05	06	14	04	10	14	28
8th	History	13	01	03	03	07	02	04	06	13
	Civics	05	01	00	01	02	01	02	03	05
	Geography	07	01	02	01	04	01	02	03	07
Total		25	03	05	05	13	04	10	14	28
9th	History	09	01	02	02	05	01	03	04	09
	Pol. Science	06	00	01	02	03	01	02	03	06
	Geography	06	01	01	01	03	01	02	03	06
	Economics	02	01	00	00	01	00	01	01	02
	Disaster Management	02	00	00	01	01	01	00	01	02
	Road Safety Education	01	00	00	00	00	00	01	01	01
Total		26	04	04	06	14	04	10	14	28

Methods of teaching Social Sciences

The teacher is free to use any one of the following methods for teaching Social Science at various levels depending upon the type of content and the situation the teacher faces in the class room. There are no hard and fast rules for employing any method however the teacher will ensure the method used is most advantageous and fruitful for the students to assimilate the required learning outcomes. The best method is that which is more activity based and in which all the senses of the students are involved. Here is a list of methods for teaching Social Science; the teacher may choose any specific methods that suit the content, class level and the situation:

Methods of teaching Social Sciences

1. Story telling Method
2. Question Answer Method
3. Observation Method with techniques like Field Trips, community Surveys, Community Service projects
4. Discussion Method having different forms like debates, Symposiums and Panel Discussions
5. Assignment Method
6. Project Method
7. The Problem Method to solve various problems of the society
8. Socialized Recitation Method with techniques like Seminars, workshop, Symposiums and Panel Discussions
9. Source Method: Historical- Political, Economic and social accounts, biographies and inscriptions, coins, Travel accounts, Religious and Secular Literature etc.
10. Dramatization
11. Role playing

Social Science

History, Civics, Geography

Class: 6th

Academic spell	Subject Area	Chapter Number	Chapter Name	Learning out comes : To understand/Know/Appreciate/Learn
UNIT I	History	01	What, Where, How and when	Our Past:- Finding sources to construct history ; Archeology as a major source, significance of archaeological remains
	Civics	01	Living & working together	How different families make a living – Difference in work (Occupations) of villages and cities – interdependence of villages and cities- importance of work of traders- concept of exchange-Giving and getting, Buying & selling.
	Geography	01	The earth in our solar system	Know the meaning of : Universe, planet, Constellations, celestial bodies, Stars, satellite, asteroids, Galaxy, Meteors, comets, Milky way; The Sun & its family; the earth as a unique planet in our solar system; The Moon its unique features.
UNIT II	History	02	The earliest People	The skill and knowledge of hunter gatherers- stone arte crafts as archaeological source- Early man and his environment.
		03	From gathering to growing food	The diversity of early domestication- The material culture generated by people in relatively stable settlements.
	Civics	02	Life & Work in villages	Occupations of different people in different regions of your state J & K- Difference between the work of farming and keeping animals-Difference between people who grow food for themselves and who grow things to sell
		03	Life & Work in Villages	In flow of people in cities- changes in a city-Reasons for migration to cities- basic requirements for a job or business- Different occupations of a city- comparison between old means of transport and communication with the present one- Importance of marketing; role of Govt. in Education.
	Geography	02	How the Globes & Maps help us	Know the meaning of: Globe, Plan, Cardinal Points, Compass, Map. Different types of Maps- Shortcomings of a Globe- Difference between a Globe & a Map, between Plan & Map, between Plan & Sketch-Locating different Latitudes on a Map.

TERM I	History	04	In the earliest Cities	The distinctive life in cities – The Archeological evidences of urban centers- its use to reconstruct processes such as craft production.
		05	What Books & Burials tell us	Flourishing & End of Mohenjo-Daro; Different developments were taking place in different places parts of the sub continents simultaneously- simple strategies of textual analysis--skill of Archaeological analysis- Importance of Burials.
	Civics	04	What is Govt.	Meaning of Govt. - Importance of Govt.-Functions of Govt.- Levels of Govt.- Difference between Govt. & Private Institutions- Income of Govt. Democracy a form of Govt.-Democracy in our lives- Votes for Women
		05	How democracy works	Meaning of equality, Apartheid (South Africa) – Needs for elections after a fixed period- Protests against Govt.- Resolving conflicts-Gender equality-Forms of Democracy other than elections
	Geography	03	Locating places on the Earth	Two basic points of references on the earth's surface To Know meaning of : Equator, Parallels of Latitude, Longitude, Poles, Important Latitudes, Heat Zones, Meridians of longitude , Relation of longitude & time, Standard time , Local time
		04	How days & Seasons are caused	To Know meaning of : Rotation, Revolution, Equinox , Solitice, Formation of days & Nights- Formation of seasons
U3	History	06	Kings, Kingdoms & new Ideas	Concept of state & its varieties- Use of textual sources in this context-Basic tenants of Upanishads, Jainism & Buddhism and the context in which they developed & flourished.
		07	Empires cities & Villages	Concept of empire- Inscriptions as sources-Variety of early urban centres- Use of coins, Sculptures, Textual Sources to reconstruct Social and Economic histories.
	Civics	06	Who looks after our villages	Needs of a village- Water, electricity, Roads, Education, Law & Order, Revenue records. Different functionaries of a village- Patwari, Tehsildar, Police Man, SHO, and their work- New law for helping women to own land- Panchayati Raj – Halqa Panchayat
	Geography	05	Major domains of the earth	To Know the meaning of: Continent, Ocean, Lithosphere, Atmosphere, Hydrosphere, Biosphere Four major domains of the Earth- Most dominant gases- Four major oceans of the earth, Importance of the oceans, Major continents, mountain formation, Plateau, Plains, The domain of the life (Biosphere), interaction of animal plant kingdom, interdependence of various realms of the earth.

TERM II	History	08	Traders ,Kings & Pilgrims	Different contents of contacts between distant lands- The motivating forces (including consequents) - implication of journeys within the sub-content- Use of textual & visual material for reconstructing the histories of such contacts.
		09	New Empires & Kingdoms	Strategies of Expansion-. Development of different Administrative system-Use of Prashastis to reconstruct political histories.
		10	Buildings, Paintings and Books	Textual and visual tradition of the period- excerpts from text and visual material for analysis and appreciation.
	Civics	07	Who takes care of our cities	Needs of city People- Schools, Hospitals, Markets, Traffic Control, Garbage disposal etc. Municipal Corporation- Functions, Income (Money), Structure.
		08	We in J & K different & alike	Similarity & differences in food habits, dress, Language, food, occupations among people of J & K—celebrating together—reasons for diversity. Concept of prejudice.
		09	Struggling for equality	Concept of equality—Gender Equality—Regional Equality—Concept of stereotypes, Discrimination, need for treating all the people Equally, Equality in the constitution, Social equality, Economic equality.
	Geography	06	India at a Glance	Major physical divisions of India, Their features in brief,Location & extent of India, administrative Divisions of India—Identifying neighboring countries of India.
		07	India ; Climate, Vegetation & wild Life	Major seasons recognized in India—Natural vegetation, Its five tropical rain forecasts, tropical deciduous forests, thorny bushes, Mountain vegetation, Mangrove forests ; Wild life.
		08	J & K at a Glance	Know about your State—physiographic divisions—Climate, seasons, Natural vegetation, forest resources—Wild life—Soil—mineral resources Map Skill: Identifying neighboring states of J & K on outline Map.
		09	Pollution	To Know meaning of : pollution—Sources of air pollution—Harmful effects of air pollution—Acidic rain—Harmful effects of water pollution, prevention & control of water pollution—Sources of soil/ Land pollution.

Social Science

History, Civics, Geography

Class: 7th

Academic spell	Subject Area	Chapter Number	Chapter Name	Learning out comes : To understand / Know / Appreciate / Learn
UNIT I	History	01	Periodization & major Developments	Changing names of the land—Broad historical trends- Kinds of sources that historian use for studying this period Activity: List different types of sources for reconstructing contemporary history
	Civics	01	We & Our Govt.	Defining Society & Govt. --- Functions & Organs of a Govt. Different forms of Govt.—Need to live in society—your role in society—suitable society.
	Geography	01	Our environment	To Know meaning of: components of environment Need to protect environment, Biodiversity.
UNIT II	History	02	New Kings & Kingdoms	Political developments and military conquests-Gujara, Pratihars, Rashtrakuts, Palas, Chahmanas(Chauhans) & Gaznavids- Changes in Administration- Relationship between Political and economic processes, Use of inscriptions to rewrite history.
		03	The Delhi Sultans	Development of political institutions & relationship amongst rulers- strategies of military control and resource mobilization, use of travelers' accounts- Court chronicles & historical buildings to reconstruct history.
	Civics	02	Making of the constitution	Defining constitution, Preamble, socialism, Sovereign, Franchise, Unity, Integrity, Republican nature of India; How India is a Secular and democratic Country- Nature & type of state of India.
		03	Earths interior	Surface of the earth, Interior layers of the earth, Rocks & Minerals- Categories of rocks—Rock cycle.
	Geography	02	Changing face of the earth	Forces responsible for changing the surface of the earth- Volcano, Earthquake, landslides, weathering & Erosion , Running water, wind and Glacier

TERM I	History	04	The Mughal Empire	Political history of 16 th & 17 th centuries-Impact of imperial administration at the local/Regional level-Akbarnama & Ain-i-Akbar as a source. Project: Make a project about any Mughal Monument in J & K.
		05	Rulers & Buildings	Range of materials, Skills and Styles used for buildings-Engineering & Construction skills, artisan organization & resources required for building works-use of contemporary documents, inscriptions & the buildings to rewrite history. Activity: arrange a visit to any heritage building of your area or state, make a report after knowing more about it. If possible Publish it in any local news paper.
	Civics	03	Fundamental Rights, Duties & Directive Principals	Fundamental rights-Meaning, list them & explain as guaranteed by the Indian constitution; Directive Principles of state policy- Meaning & name them; Fundamentals duties- Meaning & name them.
		04	Our Identity	Identification of national symbols & their features- Reasons for choosing them. Project: Make a scrap Book of National symbols of India.
	Geography	04	Air around us	Composition of air, Air pollution, Structure of Atmosphere, atmospheric pressure, Wind & its types, Moisture.
		05	Water surrounding the continents	To Know meaning of : Water cycle; ground water, transpiration, Distribution of water bodies, Ocean movements, Water conservation Map work-Show major ocean currents both hot & cold
U3	History	06	Towns, Traders and crafts person	Origin & histories of towns- Differences between founded towns and those that grow as a result of trade-use of travelers account, contemporary maps & official documents in reconstructing history Project: prepare a report on the village/town/city highlighting its origin, major events & its importance.
		07	Devotional Paths to the Devine	Major religious ideas & practices that began during the period- saints like Kabir & Nanak- Challenged formal Religions- Use of written / oral traditions in rewriting history. Project: Make a project on any local Sufi saint detailing his contribution.
	Civics	05	Govt. at the centre	Various organs of the Govt. at centre- Indian Parliament-Its bicameral nature-How laws are made-The president & the prime Minister of India- Their powers.
	Geography	06	Natural vegetation & wild life	Factors responsible for growth of vegetation. Classification of natural vegetation. Types of forests, Grasslands & Deserts.

TERM II	History	08	The emergence of regional culture.	Development of regional cultural forms including classical forms of dance & music.
		09	18th Century political formation	Developments related to the Sikhs, Marathas, Rajputs, Later Mughals- Nawabs of Awadh, Bengal & Nizam of Hyderabad.
		10	Medieval J & K	Political development during 14 th -17 th centuries- Estt. Of sultanate – Development of arts & Crafts. Religious tolerance under Zainulabdin – Chak rule- Impact of Mughal rule- engineering skills and material under the sultans & the Mughals- Prominent SufiS & Saints of the period- Spread of Islam. Ladakh consolidation under the Namgyals – Some features of Gompas – Jammu emerges under Dev Dynasty- Their administration
	Civics	06	Govt. in the State	Composition of state Legislative- Chief minister & his /her council of ministers- Their powers- Governor – his appointment & powers- administration in union Territories.
		07	Administrative structure of the Govt.	Administrative divisions of India_ States-Union Territories-District- Tehsil- Administration at each level- State Administration- District Administration- sub Divisional Level administration And Tehsil Level administration.
		08	Media & democracy	Concept of direct & In- direct Democracy- Need of Indirect democracy in India- Role of Media in Democracy- Objectives of Media- Limitations of Media- Basic Principals of journalism.
	Geography	07	Human Environment settlement & communication	Settlement-Meaning, Types of settlement; Transport-Major means of transport. Communication- Meaning Means of communication.
		08	Life in the deserts	Types of Deserts- The biggest hot Desert- Climate, Flora & Fauna Ladakh- The cold Desert- Agriculture, animals, Minerals & People. Map skill- Locate hot & Cold deserts viz. Sahara in Africa and cold desert in Ladakh
		09	Life in Tropical & Sub Tropical	Amazon Basin- Climate, people, Flora & fauna. Ganga -Brahmaputra plain – Climate, Flora & Fauna. Map Skill: Locate Ganga , Brahmaputra plains, Town/cities
		10	Life in the Temperate Grass Lands	Life/People, Climate, Flora & fauna in Prairies and in the Veld.

Social Science

History, Civics, Geography

Class: 8th

Academic spell	Subject Area	Chapter Number	Chapter Name	Learning outcomes : To understand/ Know/ Appreciate/ Learn
UNIT I	History	01	Studying the Modern Period	Changes occurring in the sub-continent- major developments during the period- Sources of different periods. Activity; discuss how present day official Resources are viewed by the people.
	Civics	01	Foreign policy of India	Meaning- Panchsheel, Cold war, apartheid, Memorandum, Non –alignment, colonialism, Disarmament, sovereignty- Foreign policy, Understanding India's relation with other countries-foreign policy of India.-- India's contribution to world affairs.
	Geography	01	Resources	Definition of resources, their variety, location & Distribution, Conservation of resources- Sustainable Development. Project: Make a survey of Resources available s in your vicinity.
UNIT II	History	02	From Trade to Territory	Developments leading company to become a political power-the consolidation of British power was linked to the formation of Colonial armies & administrative structure.
		03	Ruling the country side	Broad view of changes within rural society- continuity & changes with earlier societies- growth of new crops often disrupted the life of peasants & led to revolts. Activity- Prepare a project how Govt. policies affect the rural economy/ Agriculture sector.
		04	Colonialism & Tribal societies	Different forms of tribal societies- Use of Govt. records to reconstruct the histories of tribal societies- Impact of British policies on tribal societies- Activity_ Collect details about the life of tribal people of your state.
	Geography	02	Land, Soil, Water Natural vegetation & wild life	Land-- its uses & conversation ; soil- its formation, Degradation & Conversation_ Water--its uses & availability, its Pollution & Conversation; Natural vegetation & wild life-- as resources its distribution & conversation; types of forests ; To know meaning of terms Biosphere & ecosystem, Importance of Resources in our life, judicious use of resources , Resources for sustainable development.
		03	Mineral & Power Resources	Minerals- Definition, importance, Distribution in different continents in India & in J & K; Uses & Conservation Power Resources: Importance, different categories under conventional & Non-conventional; On outline map of India, Identify, different states of India.

TERM I	History	05	Rebellion of 1857, First war of Independence	How revolts originate & Spread- British policies & reaction of people – changes in the colonial rule after 1857- use of vernacular & British accounts to understand the rebellion.
		06	Colonialism & the city	Nature of Urban Development in 19 th & 20 th centuries – History of urban areas through photographs- emergence of new forms of town. Activity: Find out new towns/cities of your state, search of their brief history.
		07	Crafts & Industries	India as an exporter on the arrival of the British- process of deindustrialization- technologies of weaving & the lives of the weavers. Activity; Collect details of different crafts of J & K
	Civics	02	India & her Neighbors	Relation of India with its neighboring countries- regional groupings (SAARC)- its aims; Disputes of India with neighboring countries.
	Geography	04	Agriculture	Conditions necessary for agriculture, Types of Economic Activities, Farm System, Types of farming , Major Crops, Agricultural developments, Comparison of India with USA, Agriculture in J & K.
U3	History	08	Education & British Rule	History of education in India-Politics of education is linked to the question of power & cultural identity.
		09	Women, Caste & Reform	Condition of women & struggle of reformers to improve their condition. New laws of affecting women's lives – Use of autobiographies, biographies, & other literature to reconstruct history of woman & tirade against cast system. Activity: Identify the evils of present day society & suggest reforms
	Civics	03	The United Nations	Need for founding UNO-, UNO-Its charter/aims, its principles, its organs & their functions, Achievements of united Nation, India & the UN, Role of specialized agencies of UN in India.
	Geography	05	Industries	Industry- Definition, Classification, Factors affecting location, Industrial system, Industrial regions, Industrial Disaster, Distribution of major industries, Factors required for industrial development, Map skill- On Outline map of world identify different continents. Project; List small & large scale industries located in J & K.

TERM II	History	10	Changes in the Visual Arts	Major developments in the sphere of arts- Changes in these arts are linked to the emergence of a new culture- use of paintings & photographs to understand the cultural history of the period. Project: Make a chart depicting some prominent arts of Kashmir.
		11	The National movement 1870-1947	Emergence of national movement- Major developments within the national movement- Genesis & course of khilafat, Non Cooperation & civil disobedience movement, Quit India movement. Project: Major developments of Freedom struggle in Kashmir (1846-1947)
		12	India after Independence	Success & failure of Indian democracy since independence-- Use of News papers & recent writings to understand contemporary history. Project: Prepare a project high lighting developmental works undertaken in your area after independence.
		13	Afghans take over Kashmir	Silent features of Afghan & Sikh rule in Kashmir- Architect under Afghan & Sikh rulers- Jammu under Ranjit Dev- Diplomatic relations & pattern of administration- Political instability in Ladakh- Dogra conquest of Ladakh.
	Civics	04	Global Issues	Common problems of the different countries of the world- Human rights Violation- Civil Rights, Political rights, Economic, social & cultural Rights. Child Labour, Arms Race, Global disparity, Environmental Degradation, Poverty, Population Explosion, Terrorism- solution of all these problems.
		05	Disaster Management	Concept of disaster- types of Disaster, Methods of disaster management, Disaster management in India ,Tips to handle disaster (awareness)
	Geography	06	Human Resources	Human Resources- Meaning, Factors affecting growth & Distribution population- Distribution, Density: Population Change, Patterns of population, Population composition.
		07	Know about your state J & K	Figures & Facts about J & K (General information- Geographically, Political, industrial, Plants, animals, religion, Sports Etc). Demographic profile of J & K as per census 2011 & State wise population of India. Map Skill: 1) Identify bordering states of J & K on outline map. 2) Neighboring states of J & K of India on outline map.

Social Science

Class 9th

Academic spell	Subject area	Chapter number	Chapter name	Learning Outcomes
Unit I	History	1	Event and process The French Revolution	Events and process that shaped the identity of the world. Development and factors that led to French Revolution People and ideas that inspired the revolution Written, oral and visual material as a source for the history of revolution.
	Geography	1	India- Size and location	Location and size :of India and J&K. Location of neighboring countries of India. Position and contact of India with respect to other countries of the world. Map work: Identifying/locating – group islands in the Arabian Sea, bay of Bengal, neighbors of India, states through which Tropic of Cancer, passes, Southernmost tip of India.
	Economics	1	Money and Banking	Barter System, Evolution of Money, Money as a medium of Exchange, Modern forms of money, Currency. Meaning of Bank- Types of banks, types of Bank Accounts/Deposits. Loan and credit activities of Banks. Banking and the common man. Opening of saving accounts, depositing and withdrawing money from saving accounts, role of post office in savings.
Unit II	History	2	Socialism in Europe and The Russian Revolution	History of Socialism through study of Russian Revolution- Causes that led to the revolution-People and ideas that contributed to revolution. Post revolution Russia- its impact on the world.
	History	3	Nazism ad the rise of Hitler	Events/developments leading to rise of Hitler and Nazism. Nazism ad Germany-its significance in shaping the politics of the World. Speeches and Writings of Nazi leaders as a source for the period.
	Political Science	1	Democracy in the	Meaning- Democracy; Difference between democracy and dictatorship, features of democracy, spread of democracy in the world as form of Government. Two tales of

			Contemporary World	democracy, changing map of democracy, phases in the expansion of democracy. Know terms- censorship, coalition, colony, martial law, Veto, referendum.
	Geography	2	Physical features of India	Major Physiographic Divisions- The Himalayan Mountains, The Northern Plains, The Peninsular Plateau, The Indian Desert, The Coastal Plains, The Islands-Formation of Himalayas. Major Physical Divisions of J&K. Map work: Location of mountains and Hill ranges, peaks, plateaus, deserts, Eastern and Western Ghats, Lakshadweep Islands.
Term I	History	4	History of J&K	Developments leading to the formation of J&K State. J&K under Dogra rulers. Changes and improvements in different spheres. Pattern of clothing in J&K.
	History	5	Forest, Society and Colonialism	How different groups grapple with the changes in the contemporary world and how these changes affect their lives. Impact of Colonialism on Forest societies. Implications of scientific forestry. Social and Central sphere of forest communities through the study of specific revolts. Oral traditions as the source for tribal revolts
	Pol. Science	2	What is democracy	Democracy- its features, broader meaning of democracy, drawbacks of democracy, Why democracy-Democratic society. Democratic and non-democratic governments.
		3	Constitutional Design	Apartheid in South Africa, Democratic constitution in South Africa ,need for constitution ,Making of the Indian Constitution by Constituent Assembly, philosophy vision underlying Constitution (Guiding values)
	Geography	03	Drainage	Meaning: Drainage, Drainage Basin, Water Divide, Perennial rivers, river system. Drainage system in India- The Himalayan Rivers, The Indus river system, The Ganga river system, The Brahmaputra system. The Peninsular rivers: The Narmada Basin, The Tapi Basin, The Godavari Basin, The Mahanadi Basin, The Krishna Basin, The Kaveri Basin- Role of rivers in the economy. River pollution.Rivers of J&K- The Jhelum and the River Chenab. Lakes in the State. Map skills: Location of rivers- Gandak, Damodar, Krishna, Narmada, Tapi, Mahanadi, Brahmaputra, Jhelum and Chenab. Lakes- Chilika, Sambhar, Wular, Pulicat, Kolleru.

	Disaster Management	03	Natural Disaster	Meaning of Disaster, hazard, mitigation; Natural Disaster- Earthquake, landslides, floods, drought, and famine, snow avalanches, cloud bursts. Effects and mitigation measures with respect to J&K.
Unit III	History	6	Pastoralists in the Modern World- Life of peasants.	What happened to pastoralists- pastoralism in the Modern World with the formation of Modern States, marking of boundaries, process of sedentization contraction of pastures and expansion of markets, varying patterns of developments with pastoral societies in different places.
	Political Science	4	Electoral politics	Why Election, types of elections in democracy, election process in India, difference between democratic and non-democratic elections, Election Commission of India, challenges to Election in India. Activity- Dramatize the process of voting in classroom and debate of parliament.
	Geography	4	Climate	Meaning- Climate, monsoon. Climate of India, Climate controls- Latitude, altitude, pressure, wind system, distance from the sea, ocean currents and relief features- Factors affecting climate of India- The Indian Monsoon- as a unifying bond. The seasons of India- Distribution of rainfall- Climate of Jammu, Kashmir and Ladakh. Map skills: Locating places with rainfall over 400 cm and less than 20 cm. Areas of low rainfall in J&K.
	Disaster Management	4	Manmade Disaster	Man-made Disaster- General concept, types, causes, effects and preventive measures with special reference to J&K for fire, Environmental degradation, transport, accidents, chemical/industrial accidents.
Term	History	7	Peasants and farmers	Emergence of different forms of farming and peasant societies. Different processes through which agrarian transformation may occur in the modern world- How agricultural system in India are different from that of other countries- Large scale farming small scale production, shifting agriculture operate on different principles and have different histories.
	History	8	History and sports- The	Issues of culture are linked to the making of contemporary world. Emergence of Cricket as an English sport- Cricket and colonialism- Cricket nationalism and de-colonization. Sports

			story of cricket	have a history and is linked with politics of power domination- stories of cricket have historical significances.
	History	9	Clothing- A social history	Clothing has a history. It is linked to the issues of cultural identity- Clothing has been the focus of intense social battles.
	Political Science	5	Working of Institutions	Democratic Institutions- Legislature, Executive and Judiciary. Working and decision making, political executive. Need for political Institutions, need for Parliament, two houses of Parliament. Prime Minister- his powers, Council of Ministers. The President- His election, powers, bicameral nature of Indian Parliament.
	Political Science	6	Democratic rights	Defining rights, need of rights in a democracy - rights in the Indian Constitution, guarantee of Fundamental Rights, expanding scope of rights.
	Geography	5	Natural vegetation and wildlife	Meaning- virgin vegetation, Flora and fauna. Relief – land, soil; climate-temperature, precipitation; major types of vegetation- tropical evergreen forests, Tropical deciduous forests, Tropical Thorn forests and scrubs. Montane forests, mangrove forests. Wildlife in India; Natural vegetation and wildlife of J&K. Map skills- labeling / identifying- areas of evergreen forests and dry deciduous forests, two natural parks in each Northern, Southern, Eastern and Western parts of the country.
	Geography	6	Population	Meaning- Population growth, population change, literacy rate, population of India as per Census 2011, population size, distribution, density, age composition, occupational structure, National policy of population; Population of J&K- Size and Growth, distribution, factors responsible for uneven population distribution in India and in J&K. Demographic attributes.
	Disaster Management	5	Road safety Education	Concept of road safety Education- Meaning and importance – Rules of the road, traffic signs, crossings, road safety signage- Mandatory, cautionary, informatory.
	Economics	02	Understanding the Indian Economy	Salient features of Indian Economy; Economic activities- Primary, secondary, tertiary activities. GDP, sectorial share in GDP. Agriculture and allied industry and services. People as Resource: Factors determining quality of population, unemployment- meaning and types; poverty- nature, meaning of poverty line, causes of poverty, measures taken to remove poverty, NREGA 2005, NFWP, PMRY, REGP, SGSY, AAY, meaning of food security.

درجہ ششم: بہارستانِ اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
جز اول ۷ سے ۱۳ دسمبر تک	دُعا، ہمارے سرسبز جنگلات، شاعر کشمیر مہجور	اسباق کی تدریس و تفہیم توضیحات کے ساتھ کرنا۔ نعت، حمد، دُعا کی وضاحت کرنا اور ان کے درمیان فرق واضح کرنا۔ املاء سکھانا۔ طلباء اپنے دوستوں، ہم جولیوں کے مختلف تجربات مثلاً ان کے سفر کے مشاہدے اور اس سے حاصل شدہ تجربات کو سننے اور سُنانے کا موقع فراہم کرنا۔ کلمہ کی مختلف قسمیں، مضامین اور درخواست لکھوانا، شعراء و ادباء کے متعلق پیرا گراف لکھنا۔	کہانیوں اور نظموں کو سمجھ کر اپنی رائے ظاہر کرتے ہیں۔ اپنی آس پاس بولی جانے والی زبانوں کا تقابل اُردو کے ساتھ کرتے ہیں۔
جز دوم ۴ اپریل تا ۱۲ اپریل تک	صبح کا ترانہ نیک عادات ہاتھی کا وزن	اسباق کی مکمل تدریس و تفہیم کرنا، صحیح املا اور رسم الخط کی طرف توجہ دینا، اخبارات، رسائل اور جریدے پڑھنے کی طرف طلباء کو مائل کرنا۔ مضامین اور درخواست لکھوانا۔ کلمہ کی قسمیں۔ ادباء کی زندگی پر پیرا گراف لکھوانا۔	ریڈیو، ٹی وی، اخبارات کو پڑھ کر ان سے متعلق تجزیہ پیش کر سکتے ہیں۔

درجہ ششم: بہارستانِ اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
میقات اول ۳۱ مئی تا ۷ جون	ہندو مسلمان، سوامی و ویکانند ایثار کا جذبہ، جاگو جگاو چغلی کھانے والا	اسباق کی مکمل تدریس و تفہیم مع توضیحات، مختلف نشستوں کا انعقاد کرنا جن میں بچوں کی قرأت اور تلفظ کی درستی ہو جائے۔ تحریری اور تقریری مقابلوں کا انعقاد کیا جائے، تاکہ طلباء کو لکھنے کا ماحول فراہم ہو جائے۔ طلباء کو اقدار اور رواداری کا سبق دینا۔ واحد جمع، تذکیر و تانیث، ضد و اضداد، کلمہ کی قسمیں، مضامین، درخواست اور ادباء پر پیرا گراف لکھوانے کی مشق۔ اشعار کی تشریح کروانا۔	کسی تحریر یا تقریر کا خلاصہ اپنی زبان میں پیش کرتے ہیں۔
جز سوم ۱۴ تا ۲۳ جولائی	شیر میسور ٹیپو سلطان برف باری حکایات	اسباق کی مکمل تفہیم و تدریس مع توضیحات، معیاری اُردو تلفظ سکھانا، تصحیح املاء، نظم اور کہانی کا خلاصہ لکھوانا۔ معنوں کے لحاظ سے اسم کی قسمیں، درخواست، مضامین، پیرا گراف لکھنے کی مشق	نظموں اور کہانیوں کا خلاصہ لکھتے ہیں۔

درجہ ششم: بہارستانِ اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
میقات دوم ۱۵ مئی تا ۲۵ اکتوبر	صحت اور صفائی گھوڑے اور ہرن کی کہانی کابلی والا بجلی کے کرشمے	اسباق کی مکمل تدریس و تفہیم مع توضیحات، مختلف تحریری اور تقریری نشستوں کا انعقاد کر کے طلباء میں ادبی ذوق اُجاگر کرنا۔ شعرِ فہمی کی رغبت پیدا کرنا تا کہ طلباء کا بول چال معیاری بن جائے۔ بناوٹ کے لحاظ سے اسم کی قسمیں، واحد جمع، تذکیر و تانیث، ضد اضداد، ساقبے لاحقے، مضامین، اقتباسات اور درخواست وغیرہ لکھنے کی مشق	طالب علم مختلف سماجی مسائل کو سمجھتا ہے اور اُن پر اپنی رائے ظاہر کرتا ہے۔

درجہ ہفتم: بہارستانِ اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
جز اول ۱۳ تا دسمبر	ترانہ وحدت ماحولیاتی توازن اخلاقِ نبیؐ	تدریسِ اسباقِ صحیح تلفظ کے ساتھ، ہم آواز الفاظ کی نشاندہی، الفاظ کو جملوں میں استعمال، اسباق پڑھاتے وقت عملی قواعد کا استعمال۔ اپنی بات اور خیالات کو آزادی سے پیش کرنے کی اجازت دی جائے۔ معنوں کے لحاظ سے اسم کی قسمیں، بناوت کے لحاظ سے اسم کی قسمیں، مضامین اور خطوط نگاری، اپنے دوست و احباب کو مختلف خط لکھنا۔	دوسروں کی باتوں اور خیالات کو سُن کر اپنے انداز سے بیان کرتے ہیں۔
جز دوم ۴ تا ۱۲ اپریل	نعت، بھلے اور بُرے کی پہچان شری رام چندرجی	درسی اسباق کی تدریس مع توضیحات، طلباء سے اسباق کی بلند خوانی اور خاموش خوانی کرائی جائے۔ میڈیا، فلم، گھر، بازار وغیرہ سے متعلق زبان کے مختلف پیراؤں کو سمجھانے کے لئے گفتگو اور بحث و مباحثے کے لئے ماحول فراہم کرایا جائے۔ فعل کی تعریف اور اس کی قسمیں	ڈرامائی مکالمات صحیح تلفظ اور مہارت کے ساتھ ادا کرتے ہیں۔

درجہ ہفتم: بہارستانِ اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
میقات اول ۳۱ مئی تا ۷ جون	قلم، شاہ ہمدان ڈاک کا انوکھا ٹکٹ، تین کہانیاں کرگل سے سرینگر تک	اسباق کی مکمل تدریس مع تفہیم و توضیح، اشعار کی تشریح، نثری اسباق اور نظموں کا خلاصہ، قواعد، زمانے کے لحاظ سے فعل کی قسمیں۔ فعل، فاعل، مفعول۔ مختلف عنوانات پر مضامین، مختلف قسم کے خطوط لکھوانا۔ محاورات مع معنی اور استعمال۔	طلباء نظموں اور گیتوں کو موزونیت کے ساتھ ادا کرنے کے علاوہ اُن کا تجزیہ کرتے ہیں۔
جُز سوم ۱۶ تا ۲۳ جولائی	پرندے کی فریاد نیوٹن کا کارنامہ برزہامہ کی تاریخی اہمیت	اسباق کی مکمل تدریس تفہیم و توضیحات۔ واو معروف، مجہول اور معدول کا استعمال، مضمون نویسی، خطوط نگاری، مکالمہ آرائی کی مسلل مشق۔ قواعد حروف اور اقسام حروف۔ طلباء سے گروپ میں مختلف موضوعات پر بحث و مباحثہ کرایا جائے۔	طلباء نثر اور نظم کی الگ الگ شناخت کرتے ہیں۔
میقات دوم ۱۵ تا ۲۵ اکتوبر	ہمارا وطن، سائنس اور جنگ، کمشیر کے دلکش باغات، آدمی نامہ، اولمپک کھیل	تدریسی اسباق مع تفہیم و توضیحات۔ اشعار کی تشریح اور نثری اقتباسات کی سلیس۔ قواعد۔ حروف کے اقسام کی جانکاری۔ مضامین، خطوط، مکالمہ اور مباحث کی مشق۔ تحریری مقابلوں کا انعقاد۔ ادباء کے حالات زندگی۔ اسم معرفہ کے اقسام۔	طالب علم مختلف شخصیات کے حالات زندگی بیان کرتا ہے۔

درجہ آٹھویں: بہارستان اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
جز اول ۱ تا ۱۳ دسمبر	حمد، کاہلی، لل دید	اسباق کی مکمل تدریس، تفہیم و توضیحات۔ اُردو سُننے اور پڑھنے کی معیاری صلاحیت اُجاگر کرنا۔ اسباق کے گرائمری تقاضے پورے کرنا۔ حمد، نعت، منقبت، مناجات اور دُعا کی تعریف۔ مختلف ادبی موضوعات پر مختصر بحث کرنا۔ مصنف اور سبق کا حوالہ دے کر نثر کا سلیس اور نظم کی تشریح کرنا۔ گرائمر: اضداد، تذکیر و تانیث اور واحد جمع۔ اسماء اور افعال کی تعریف۔ مختلف موضوعات پر مضمون۔ نجی، سرکاری اور کاروباری خطوط۔ درخواست	طلباء نصابی کُتب کے علاوہ تمام قسم کی اردو کتابیں پڑھ اور سمجھ سکتا ہے۔ مختلف موضوعات پر اپنی رائے کا اظہار کر سکتا ہے۔
جز دوم ۶ تا ۱۲ اپریل	نعت، استاد کا احترام، نوبل انعام کی کہانی	اسباق کی مکمل تدریس، تفہیم و توضیحات۔ اُردو سُننے اور پڑھنے کی معیاری صلاحیت اُجاگر کرنا۔ اسباق کے گرائمری تقاضے پورے کرنا۔ املاء پر زور دینا نثری اسباق کی سلیس کرنا۔ گرائمر: بناوٹ کے لحاظ سے اسم کی قسمیں مثالوں کے ساتھ۔ عام فہم موضوعات پر مضامین۔ نجی اور کاروباری خطوط۔	طالب علم نظموں اور کہانیوں کو مناسب لب و لہجے کے ساتھ ادا کر سکتا ہے اور خود بھی چھوٹی چھوٹی کہانیاں لکھ سکتا ہے۔

درجہ آٹھویں: بہارستان اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
میقات اول ۳۱ مئی تا ۷ جون	سینتاجی کی آہ وزاری گیہوں کا دانہ، جابر بن حیان، خاک وطن، سگریٹ نوشی کی تباہ کاریاں آزمائش شرط ہے۔	اسباق کی مکمل تدریس، تفہیم و توضیحات۔ اُردو سُننے اور پڑھنے کی معیاری صلاحیت اُجاگر کرنا۔ اسباق کے گرائمری تقاضے پورے کرنا۔ اسباق اور نظموں کا خلاصہ۔ بیت بازی مقابلے۔ نظموں کو زبانی یاد کرنا۔ اقتباس کی سلیس۔ گرائمر: واحد جمع و جمع الجمع۔ معنوں کے لحاظ سے اسم کی قسمیں۔ فعل، فاعل اور مفعول۔ ہم وزن الفاظ۔ ردیف اور قافیہ کا تعارف۔ تشبیہ کا استعمال۔ مختلف موضوعات پر مضمون۔ نجی دفتری اور کاروباری خطوط۔	ڈرامائی مکالمات صحیح تلفظ کے ساتھ ادا کر سکتے ہیں۔ کہانیوں اور نظموں پر تبصرہ کر سکتا ہے۔
جز سوم ۱۶ تا ۲۳ جولائی	ایک لڑکی۔ چند خلا باز خواتین۔ گوتم بدھ ہماری تاریخ	اسباق کی مکمل تدریس و تفہیم مع توضیحات۔ اسباق سے چندہ ضد اضداد، واحد جمع، تذکیر و تانیث۔ جملے کی قسمیں، مختلف موضوعات پر مضمون۔ نجی، دفتری اور کاروباری خطوط۔	کسی بھی تحریر یا تقریر کا خلاصہ ادا کر سکتے ہیں

درجہ آٹھویں: بہارستان اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
میقات دوم ۱۵ تا ۲۵ نومبر	زعفران۔ کمپیوٹر کا ارتقائی سفر، میرا وطن۔ اُف یہ ماحولیاتی آلودگی۔ راجہ جامبو لوچن۔ پو پتھین جن	اسباق کی مکمل تدریس، سوالات اور جوابات کے ساتھ۔ اسباق میں موجود گرائمر کی تدریس۔ اسباق اور نظموں کا خلاصہ۔ بناوٹ کے لحاظ سے فعل کی قسمیں۔ نظم اور ڈراما کا تعارف فعل، فاعل، مفعول، حروف کے اقسام غلط اور صحیح جملوں کا استعمال۔ مختلف موضوعات پر مضمون۔ نجی، دفتری اور کاروباری خطوط۔	سماج میں ہونے والے واقعات کے تئیں حساس اور بیدار ہے۔ آس پاس رونما ہونے والے واقعات پر کھل کر بات کر سکتا ہے۔ نظم یا کہانی کا مرکزی خیال اور خلاصہ لکھ سکتا ہے۔

درجہ نویں: بہارستانِ اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
جز اول ۱۳ تا ۱۹ دسمبر	انسان کامل غزل فراق گورکھپوری	اسباق کی مکمل تدریس، تفہیم و توضیحات۔ معیاری اُردو پڑھنے، لکھنے اور بولنے کی صلاحیت اُجاگر کرنا۔ سیرت نگاری کی جانکاری فراہم کرنا۔ تشریح اشعار مع حوالہ شاعر۔ صنف شاعری گرائمر: واحد جمع اور تذکیر و تانیث کا فرق جملوں کے ذریعے واضح کرنا۔ نجی خطوط	طلبہ نصابی کتاب کے علاوہ مختلف ذرائع سے حاصل ہونے والی کتابیں بھی پڑھتے ہیں۔ نظموں اور کہانیوں کو مناسب لب و لہجہ کے ساتھ پڑھتے ہیں۔ پڑھی ہوئی کہانیوں، نظموں اور خاکوں کو پڑھ کر ان کے بارے میں اپنی رائے تحریر کر سکتے ہیں۔ مختلف قسم کے نثری اور شعری اصناف کے درمیان فرق کو واضح کر سکتے ہیں۔ چھوٹی چھوٹی نظمیں اور کہانیاں لکھ سکتے ہیں۔
جز دوم ۶ تا ۱۲ اپریل	انفارمیشن ٹیکنالوجی غزل میر غلام رسول نازکی	اسباق کی تدریس مع تفہیم و توضیحات و سلیس۔ اشعار کی تشریح مع حوالہ شاعر۔ صنف شاعری گرائمر: الفاظ اور محاورات کو اپنے جملوں میں استعمال کرنا۔ دفتری خطوط۔ اسم مصدر، اسم صفت، اسم ضمیر	

درجہ نویں: بہارستان اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
میقات اوّل ۳۱ مئی تا ۷ جون	اُردو کہاں پیدا ہوئی دیوان مرحوم کی یاد میں ماحولیاتی آلودگی غزلیات: فیض احمد فیض۔ تنہا انصاری نظم: تعلیم سے بے توجہی کا نتیجہ۔ نئی تہذیب	تدریس اسباق مع تفہیم، توضیحات اور سلیس۔ تشریح اشعار مع حوالہ شاعر۔ خلاصہ اسباق و نظم ادباء و شعراء کی حیات اور ادبی کارناموں کی جانکاری۔ نثری اور شعری اصناف کی جانکاری۔ گرامر: فعل کے مختلف اقسام (مفرد، مرکب، لازم و متعدی، معروف، مجہول وغیرہ) نچی، دفتری اور کاروباری خطوط۔ مختلف موضوعات پر مضمون لکھوانا۔	اپنے ارد گرد رونما ہونے والے واقعات ، حادثات اور مسائل کے تئیں حساس اور بیدار ہیں اور ان کا آزادانہ تجزیہ بھی کر سکتے ہیں۔ زبان کے جمالیاتی ذوق سے واقف ہیں۔
جوسوم ۱۶ تا ۲۳ جولائی	لاٹری کا ٹکٹ درد کا مارا غزل: شوریدہ کاشمیری نظم: بزم انجم	تدریس اسباق مع تفہیم و توضیح اور سلیس۔ تشریح اشعار مع حوالہ شاعر۔ خلاصہ اسباق و نظم۔ نثری اور شعری اصناف۔ گرامر: حروف بیان	

درجہ نویں: بہارستان اُردو

تقسیم نصاب و میقات برائے امتحان	عنوانات	تدریسی طریقہ کار و مشق	آموزشی ماحصل
میقات دوم ۱۵ تا ۲۵ اکتوبر	<p>میں ایک شہر تھا۔ پونچھ</p> <p>میر مہدی مجروح کے نام</p> <p>منشی ہرگوپال تفتہ کے نام</p> <p>نذیر احمد کی کہانی کچھ میری</p> <p>کچھ اُن کی زبانی۔</p> <p>غزلیات: شہریار، عابد</p> <p>مناوری، پرتپال سنگھ بیتاب</p> <p>نظم: کشمیر، پری محل، قبر</p> <p>مثنوی: دُنیا کی ناپایداری</p>	<p>تدریس اسباق مع تفہیم، توضیحات۔ معیاری اُردو پڑھنے، لکھنے</p> <p>اور بولنے کی صلاحیت اُجاگر کرنا۔ خاکہ، ناول اور خطوط نگاری</p> <p>سے متعلق جانکاری دینا۔ نثری اسباق کا سلیس اور اشعار کی تشریح</p> <p>معہ مصنف و شاعر کا حوالہ۔ ادباء اور شعراء کی حیات اور ادبی</p> <p>کارنامے۔ شعری اصناف کی جانکاری دینا۔</p> <p>گرائمر: واحد جمع اور تذکیر و تانیث کا فرق جملوں کے ذریعے</p> <p>واضح کرنا۔</p> <p>مرکب اضافی، مرکب جاری، مرکب توصیفی، مرکب</p> <p>اشاری۔ جملہ اسمیہ خبریہ۔</p> <p>ترکیب نحوی، جملہ اسمیہ۔</p> <p>نجی، کاروباری اور دفتری خطوط۔ مختلف موضوعات پر مضامین۔</p>	آموزشی ماحصل

سند

مورخہ ۵ تا ۱۰ فروری ۲۰۱۸ء سٹیٹ انسچوٹ آف ایجوکیشن سرینگر میں مضمون اُردو کے لئے نصاب اور میقات بنانے کے لئے ایک ورک شاپ کا انعقاد ہوا، جس میں نصاب اور میقات از سر نو ترتیب دئے گئے۔ اس نہایت ہی اہم نوبت کے حامل پروگرام میں جماعت اوّل سے لے کر نویں تک کے لئے آموزشی ماحصل بھی مقرر کئے گئے۔ درج ذیل اساتذہ و ماہرین اُردو نے مذکورہ بالا ورک شاپ میں حصہ لیا: -

نمبر شمار	نام اُستاد و ماہر	کام کرنے کی جگہ	دستخط
۱۔	مجید مجازی	گرز ہائی سکول حاجن	
۲۔	شا کر شفیع	ہائر سیکنڈری سکول گاڑ کھوڑ	
۳۔	ڈاکٹر غلام نبی حلیم	زون بیروہ	
۴۔	جاوید کرمانی	ایس آئی ای سرینگر	
۵۔	ڈاکٹر رابعیہ نسیم مغل	ایس آئی ای سرینگر	
۶۔	عامر حسین	ایس آئی ای سرینگر	

مضمون: کاشتر

جماعت: ششم

Course/Period	Content	Learning Outcome (ہیچن تر)
یونٹ اکھ	دعا، لل دبد	لوکڑ موکڑ سوال پڑھیں۔ لفظ راشس منز ہر برکرن: آ، ا، آ، آوازن پٹھ پٹھ پٹھ پٹھ لفظ لکھیں۔ لل دبد تہ شیخ العالم سندر کارنامہ بوزناؤتھ شرن منز اخلاق بیدار کرن۔ شیخ العالم سندر کارنامہ گنراونہ باپتھ تقریری مقابلہ کرن۔
یونٹ ز	گلشن وطن چھ سوئے، باہو قلہ	دینہ امتین سبقن ہند بن سوالن ہندی جواب لکھیں۔ رگن ہندی ناو لکھیں۔ پاٹون جنگلی جانورن ہندی ناو لکھیں۔ واحدتہ جمع ناو تو ہیچناونی۔ گنہ اکس موضوعس پٹھ داہ جملہ لکھیں۔ نظم پنتین لفظن منز وہہناونی۔
فرم اکھ	چاٹھ، حسن شاہ کھیہ ہا، سوئٹھ، پڑوٹھ پٹھ چھ، انٹرنٹ	دینہ امتین سبقن ہند بن سوالن ہندی جواب لکھیں۔ خالی جلیہ پڑوٹھ تہ معنی دار جملہ بناونی۔ لفظ جملن منز ورتاونی۔ ٹوی جملہ ژہارنی۔ درخاس لکھیں۔ چٹھ لکھیں۔ شری پنے دودہ دیشہ چہ زندگی ہندی واقعہ ڈایری پٹھ لکھیں ہیچناونی۔ او، او، او، لفظن پٹھ پاٹھ پٹھ لکھیں۔
یونٹ تڑے	وہر، شری، آفون ہند مقابلہ	دینہ امتین سبقن ہند بن سوالن ہندی جواب لکھیں۔ لفظ اڈر لاوونی۔ لفظن ہند ورتاؤ جملن منز۔ گنہ موضوعس پٹھ داہ جملہ لکھیں۔ ہسار سوال بناونی تہ تمن جواب لکھیں۔ شری اکھ اکس یزتھ کرن ہیچناونی۔ اے، اے، اے، آوازن پٹھ پاٹھ پاٹھ لفظ لکھیں۔
فرم ز	فاصلہ، رانی جھوتی، لگہ باتھ، آٹک پانگ، شال	دینہ امتین سبقن ہند بن سوالن ہندی جواب لکھیں۔ محاورن ہند استعمال کرن۔ واحدتہ جمع ناو تو، ناوت تہ باؤت، فہس معاف کرنہ خاطر درخاس / مضمون لکھناونی۔ شری ڈراما ناوتھ سبق ہیچناونی۔ کاشتر زبانی ہنز پاٹھ پڑ لکھناونی تہ لگہ باتھ شری گوناونی۔ تالری، ٹری، میل آوازن پٹھ پاٹھ پاٹھ لفظ لکھناونی۔

مضمون: کاشتر جماتھ: ستم

Course/Period	Content	Learning Outcome (ہیچن تر)
یونٹ اکھ	دعا، سیا	آ، آ، ا، ا، ای، آوازن ہند لفظن مژورتاؤ۔ لوکڑ لوکڑ جملہ بناؤنی۔ دینہ آمتن سبقن ہند بن سوالن ہندی جواب لکھنی۔ شارنٹرس مژ پھر نی۔ لفظ اڑ رلاوتھ نو لفظ بناؤنی۔ ناوت ورتاوس مژان۔ ناوتی رلاوتھ نو لفظ دیکڑنی۔ شری کاٹھہ کاشتر دہل بوزناؤنی۔
یونٹ ۲	پاٹی کیوم، لداخہ پٹھہ چٹھہ	پاٹھہ محاورہ تہ ہند معنی۔ دینہ آمتن سبقن ہند بن سوالن ہندی جواب لکھنی۔ شری گنہ تہ موضوعس پٹھہ داہ جملہ لکھناؤنی۔ آ، اؤ، او، او، او، آوازن ہند لفظن مژورتاؤ۔ لوکڑ لوکڑ جملہ بناؤنی۔ خالی جلیہ پڑوتھ شری چٹھہ لکھناؤنی۔
ٹریم اکھ	کاشتر زبان، ترے لکھ کتھہ، کاٹل، ٹیلی وین	دینہ آمتن سبقن ہند بن سوالن ہندی جواب لکھنی۔ نو نو سوال ژھارنی۔ شارنٹرس مژ پھر نی تہ نٹرس سلپس کرن۔ درخاس یا چٹھہ لکھنی تہ گنہ تہ ا کس موضوعس پٹھہ داہ جملہ شری لکھناؤنی۔ موخصر یا غام (SMS) شری لکھن ہیچناؤنی۔ اے، اے، اے، اے، تارڑ، ٹیل، ٹس آوازن ہند ورتاوتہ لوکڑ لوکڑ جملہ بناؤنی۔
یونٹ ترے	شاہ ہمدان، میونے وطن مبارکھ	دینہ آمتن سبقن ہند بن سوالن ہندی جواب لکھنی۔ کاٹھہ تہ شاعرس پٹھہ شری کم کھوتہ کم داہ جملہ لکھناؤنی۔ شارن گندنگ (بیت بازی) مقابلہ کرناؤن۔ نر تہ مادناؤنی تہ اشارناؤنی ورتاوس مژان۔ اکھ متبادل لفظ دین؛ مثالے: پلوئون وول = سہو وغار وغار۔ املا لکھناؤنی
ٹریم ۲	بابا جتو، ڈل، پلاسٹک، موج، رابعیہ، سانہ تارٹھکو کیشہ حوالہ	دینہ آمتن سبقن ہند بن سوالن ہندی جواب لکھنی۔ نٹریارس سلپس کرن۔ افسانس، دلپلہ تہ نظمہ متعلق زان دنی۔ عام ناؤنی، خاص ناؤنی تہ جمائو ناؤنی ورتاوس مژان۔ چٹھہ یا درخاس لکھن تہ گنہ تہ موضوعس پٹھہ شری مضمون لکھناؤنی۔ ماجہ متعلق شری پندہ جملہ لکھناؤنی، تہ مژ ماجہ ہنز اہمیت ووتلاونہ پیہ۔ ہفتہ کمن ستن دوہن ہندی ناوتہ موسمن ہندی ناو، کاشتر بن رتن ہندی ناو۔ رباعی ہنز زان دنی۔ دہن پلاسٹک چیرن ہندی ناو لکھناؤنی (شری گوہن پانے وٹو)

مضمون: کاثر جماعت: اٹھم

Course/Period	Content	Learning Outcome (ہنچھن تر)
یونٹ اکھ	دعا، دبرائی	صدائے آوازن ہند مختلف صورثن مژورتاؤ: مثال: گوڈ/مژس/اندس۔ دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ لفظن ہند معنی تہ جملن مژورتاؤ۔ خالی جلیہ پُر دینہ تہ جنس ناوتین ہند ورتاؤ۔ کنبہ پیرا اگر افس سہل بناؤن۔ دوستا دگھ کاثر زبانی ہنژان دینی (املا نویسی)
یونٹ ۲	اولو دگی، ان پوشہ نیلہ نیلہ ون پوشہ،	دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ محاورن ہند معنی تہ جملن مژورتاؤ۔ کڑاؤت، اشارناؤت ورتاؤس مژرائی۔ لفظن ہندی ضد۔ غزل متعلق شر بن زان دینی۔ شر بن پانہ شار لکھن کُن راعب کُرُن۔ ونہ کین چیزن ہندی ناو لکھناؤنی۔
ٹریم اکھ	مخدوم صاب ربڈ کڑاس سسائٹی، رسیہ، مان سر	دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ ٹوی ٹوی سوال ژھاؤنی۔ شارنٹس مژمہر فی تہ نٹس سلپس کُرُن۔ لگہ کتھ تہ مزاح کیاہ گو۔ درخاس یا چٹھی لکھن تہ مضمون نوپسی۔ ناؤتی تہ کڑاؤتی رلاؤتھ محاور بناؤنی، باوتج زان دینی۔ نٹس پارس مژمژ سوالن جواب ژھاؤن۔ شر بن اخبار رپوٹس متعلق زان دینی۔ اولیا ہن متعلق لوکڑ لوکڑ پڑ وجبہ دینی۔
یونٹ تڑے	کوگرچھ ونان، مانچھ ٹکر، نستہ پھچ	دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ باوتین ناؤتی تہ ناوتین باؤتی بناؤنی، کڑاؤتی تہ امکو قسم، پتھ کال، ازکال تہ ینہ وول کال۔ کڑاؤل، کڑاؤت تہ کڑوومت۔ کانہہ تہ سیاسی، سماجی یا اقتصادی مضمون لکھن ہنچھناؤن۔ واکھس متعلق زان دینی۔ تہ لگہ کتھن متعلق زان دینی۔ لفظہ راش ہراونہ باپتھ سبقن مژدینہ آمتی لفظ تہ معنی یاد کرتھ تم جملن مژورتاؤنی۔
ٹریم ۲	یتھ ریش واروتبتار اچھ، ہواؤلی جہاز، کشیر ہنژ کیشہ پرانہ عمارژ، ڈاکہ وول، پاتھین	دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ نٹس پارس سلپس کُرُن تہ سوالن جواب لکھن۔ خالی جلیہ پُر وتھ عبارژ پُر کرنہ، شارن ہنژ وہو ہنہ تہ نٹس عبارژ سلپس کُرُن۔ محاور جملن مژورتاؤنی۔ کانہہ تہ سیاسی، سماجی یا اقتصادی مضمون لکھن، چٹھی تہ درخاس لکھناؤنی۔ شر کین متعلق زان دینی۔ اخبار رپوٹ لکھن ہنچھناؤنی۔ اشتہار لکھن ہنچھناؤنی، رپوٹ تہ اشتہار بناؤنی۔ کشیر ہنژن تاریخی عمارژن ہنژ شکلہ کاپی پٹھ چسپان کرنہ۔ ڈاکٹرس تہ بہارس درمیان گمہ کانہہ کتھ باتھ شری لکھناؤنی۔

مضمون: کاثر جماتھ: نوم

Learning Outcome (پچھن تر)	Content	Course/Period
دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ مرکب لفظ بناؤنی۔ ناوت تہ اشار ناوت۔ پنہ نس اوئد پکھس متعلق شری زانی یاب کرنی۔	کاثر زبان، اوزون تہ فضاچ آلودگی، خون تہ خونچ کمی	یونٹ اکھ 10 Marks
دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ کراؤت، رکہ کراؤت، ڈکھ کراؤت تہ کراؤل۔ مختلف کال۔ تلیم صنف ہنزان دنی۔	شاہ اسرار الدین، کیشہ کاثری تلیم، کتر جہ بچہ تہ الہ بیول	یونٹ ز 20 Marks
دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ ملوت (Preposition)، بندت (Conjunction)، کراؤت (verb)، کراؤموت (object)، کراؤل (subject)۔ نثر سلیپس کرن۔ مضمون لکھن۔ چٹھری تہ درخاس لکھن۔ ڈراما صنف ہنزان دنی۔ اشتہار لکھن۔	مینہ توگ نہ کیشہ، روپیہ، فاید، اینڈ ہی از اوٹ، مجرم	ٹریم اکھ 20 Marks
دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ نعت، لہلا تہ غزل صنف ہنزان دنی۔ پوت لوگ تہ بڑوئہ لوگ۔ لگہ کتھہ، خاکہ، صنف ہنزان دنی۔	نعت، لہلا، غزل (محمد ایوب بیتاب)، غزل (منشور بانہاکی)	یونٹ تڑے 15 Marks
دینہ آمتین سبقن ہند بن سوالن ہندی جواب لکھن۔ واحد، جمع، مذکر، مونث تہ متضاد الفاظ پچھناؤنی۔ نظم، مثنوی تہ رباعی صنف ہنزان دنی۔ نثر سلیپس کرن۔ شعرن تشریح کرنی۔ مضمون لکھن۔ چٹھری تہ درخاس لکھن۔	کراؤج ٹلان ہی مالہ گر فساد، انسانس گن، خاند رنامہ، یادوستو، کشپر، رباعیہ	ٹریم ز 35 Marks