

SWARNPRASTHA PUBLIC SCHOOL, SONIPAT

*Under the aegis of Indraprastha Education and
Charitable Society*

SYLLABUS 2021-22

CLASS- IX



The whole purpose of education is to turn mirrors into windows

SUBJECT: ENGLISH

LEARNING OBJECTIVES:

■ On the completion of the academic course, the learners will be able to demonstrate an understanding of the four skills reading, writing, speaking and listening.

Listening Skill:

- Understand English language spoken in their immediate environment.
- Develop familiarity with English phrases used in specific instructions.
- Respond to comprehension questions related to the poem, in one word/phrase, orally.
- Identify rhyming words at the end of separate lines in the prose/ poem.

Speaking Skill:

- Enhance language skills
- Use appropriate words and expressions.
- Use English as a means of communication.
- Ask Questions for developing critical thinking
- Pronounce English correctly and intelligibly.
- Narrate simple experiences and series of events to convey its essence and intention.

Writing Skill:

- Write sentences and paragraph coherently.
- Write answers to Textual questions correctly.
- Creative writing.

Reading Skill:

■ Through the course, the student should be able to - imbibe ethical, moral, national and cultural values through various forms of literature.

TEXTBOOKS:

- Literature: Beehive
- Supplementary Reader: Moments

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	LEARNING OUTCOMES	SUGGESTED ACTIVITIES
APRIL (22)	■ The Fun They Had	■ Determiners	■ Diary Entry	■ Students will learn the	■ Debate on the topic

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	LEARNING OUTCOMES	SUGGESTED ACTIVITIES
APRIL (22)	<ul style="list-style-type: none"> ■ The Road Not Taken ■ The Sound Of Music ■ Wind 	miners ■ Editing, Omission and Gap-Filling		importance of school and teachers. They will understand about the importance of being social. ■ They will understand the importance of taking the right decision in their life. ■ They will know how great musicians are made. How much it takes to become someone great and successful. ■ Wind- The students will understand that one needs to be strong to face all obstacles in life. ■ They will learn how to write a diary and the importance to penning down thoughts. ■ They will understand how to edit a written material.	<ul style="list-style-type: none"> ■ Debate on the topic ‘Can Artificial intelligence replace teachers at school, doctors in the hospital, housewives at home?’ ■ Research work on ‘Robert Frost’ His Life and famous works. Poetic themes of Robert Frost., ■ The Road Not Taken: personal experience. ■ Secrets of Robert Frost’s popularity., ■ Imagine the famous singer Lata Mangeshkar is going to visit your school. You have been asked to introduce her to the audience before her performance. How would you introduce her?, ■ Students will be asked to read Editorial section of that day and to write an article based on those sections.
MAY (22)	<ul style="list-style-type: none"> ■ The Lost Child ■ The Adventures of Toto ■ The Little Girl ■ Rain on the Roof 	<ul style="list-style-type: none"> ■ Verbs ■ Tenses ■ Editing, Omission and Gap-Filling based on above given topics. 	<ul style="list-style-type: none"> ■ Article Writing ■ Dialogue Completion 	<ul style="list-style-type: none"> ■ Students will understand the importance of parents in their life. They will develop a sense of responsibility towards themselves and their parents. ■ The students will 	<ul style="list-style-type: none"> ■ Chain of sentences ■ Read about Mulkh Raj Anand his famous works and life. ■ Ruskin Bond famous work adapted into movies will be discussed

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				understand that having a pet is a great responsibility and it should be brought when the whole family is ready. ■ Students will learn how to write a dialogue.	
JUNE (5)	Revision of the topics done till now and PT-01				
JULY (24)	<ul style="list-style-type: none"> ■ A Truly Beautiful Mind ■ The Snake and the Mirror ■ Iswaran the Storyteller ■ In the Kingdom of fools 	<ul style="list-style-type: none"> ■ Prepositions ■ Voice ■ Editing, Omission and Gap-Filling based on above given topics. 	<ul style="list-style-type: none"> ■ Short Story 	<ul style="list-style-type: none"> ■ The students will learn about the life of Albert Einstein. ■ The students will understand that how a snake forgot its task because it got lost in its beauty. ■ Importance of storytelling. ■ How foolishness and greed can put you in trouble. 	<ul style="list-style-type: none"> ■ Theory Of Relativity will be shown and explained with the help of Science teacher in A.V Room ■ Spell Bee activity
AUGUST (23)	<ul style="list-style-type: none"> ■ The Happy Prince ■ Weathering the Storm in Ersama ■ The Last Leaf ■ A House Is Not a Home 	<ul style="list-style-type: none"> ■ Modals ■ Clauses ■ Editing, Omission and Gap-Filling based on above given topics. 	<ul style="list-style-type: none"> ■ Revision of Informal Letter ■ Revision of Dialogue completion 	<ul style="list-style-type: none"> ■ The students will understand the importance of helping others. ■ They will learn the art of letter writing and its importance. 	

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	LEARNING OUTCOMES	SUGGESTED ACTIVITIES
SEP-TEMBER (PT-02) (23)	<ul style="list-style-type: none"> ■ The Legend of the Northland ■ No Men Are Foreign ■ The Lake isle of Innisfree 	<ul style="list-style-type: none"> ■ Narration 		<ul style="list-style-type: none"> ■ Students will understand the meaning of legend and the legends related to the places. ■ They will know the meaning of brotherhood. 	<ul style="list-style-type: none"> ■ Find and write about any one legend after discussing with parents, friends and family.
OCTOBER (21)	<ul style="list-style-type: none"> ■ My Childhood ■ Packing, ■ Reach For The Top ■ The Bond of Love ■ The Duck and the Kangaroo ■ On Killing a Tree 		<ul style="list-style-type: none"> ■ Revision for ■ Diary entry ■ Short Story 	<ul style="list-style-type: none"> ■ Students will know about the life of Abdul Kalam and understand that success is not related to richness. Hardwork can only bring success. ■ They will know about the beautiful relationship between man and animals. ■ They will know that plants also have a life like humans do. 	<ul style="list-style-type: none"> ■ ‘Speech’ they may wish to read the texts of well-known speeches such as Nehru’s ‘Tryst with Destiny’.
NOVEMBER (18)	<ul style="list-style-type: none"> ■ A Slumber Did My Spirit Seal ■ Kathmandu ■ If I Were You 	<ul style="list-style-type: none"> ■ Revision of, ■ Reported Speech ■ Prepositions., ■ Modals ■ Clauses., ■ Modals ■ Verbs., ■ Determiners., ■ Tenses ■ Voice., ■ Editing, Omission and Gap-Filling based on above given topics. 	<ul style="list-style-type: none"> ■ Revision and practice for ■ Article Writing ■ Short Story 	<ul style="list-style-type: none"> ■ Students will know about the beauty of places like Kathmandu. ■ Importance of presence of mind through the chapter ‘If I Were You.’ 	<ul style="list-style-type: none"> ■ The map reading activity and the activity on locating the possible routes from Kathmandu to different places in India.

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	LEARNING OUTCOMES	SUGGESTED ACTIVITIES
DECEMBER PT-03 (23)	<ul style="list-style-type: none"> The Accidental Tourist The Beggar 	<ul style="list-style-type: none"> Revision of, Reported Speech, Prepositions, Clauses, Modals, Verbs, Determiners Tenses, Voice, Editing, Omission and Gap-Filling based on above given topics. 	<ul style="list-style-type: none"> Revision and practice for, Diary entry Article Writing, Short Story, Dialogue completion Informal Letter 	<ul style="list-style-type: none"> Students will know about the importance of an organized mind and behaviour, the importance of hardwork and labour. 	<ul style="list-style-type: none"> Spell Bee
JANUARY (18)	REVISION				
FEBRUARY (19)	FINAL EXAMS- 14 Feb onwards				

SUGGESTIONS TO THE PARENTS:

- Parents should try to speak English at home at some point each day
- Inculcate the habit of reading English Newspaper.
- Watch appropriate English language television programme or DVDs.
- Use the internet to find and access websites with ESL practice activities.
- Remember the Basics! Practice makes perfect!

WEIGHTAGE:

Section A : Reading (Based on reading skills)	20	Section B: Writing and Grammar	30	Section C: Literature (Textbook and Extended Reading Text)	30
Factual Passage- 8 Marks Discursive Passage- 12 Marks		Diary Entry / Article Writing- 8 Marks Short Story- 10 Marks Gap filling- 4 Marks Editing / Omission- 4 Marks Rearranging- 4 Marks		1- Extracts- 4 Marks 4 - Short answer type question- 8 Marks 2- Long Answer Type Questions- 16 Marks	
Total 80					

SYLLABUS – HINDI (केर्स-B)

शिक्षण उद्देश्य-

- विद्यार्थियों को दैनिक जीवन में हिंदी में समझने-बोलने के साथ-साथ लिखने की क्षमता का विकास करना।
- संचार के विभिन्न माध्यमों में प्रयुक्त हिंदी के विभिन्न रूपों को समझने की योग्यता का विस्तार करना।
- विद्यार्थियों की कल्पना-शक्ति, बोध-शक्ति व विवेचना-शक्ति का विकास करना।
- विद्यार्थियों को भाषा के शुद्ध रूप का प्रयोग व शुद्ध रूप को पहचानने में सक्षम बनाना।
- अपनी मातृ भाषा और परिचित गत भाषा को साथ रखकर हिंदी की संरचनाओं की समझ बनाना।

पाठ्यपुस्तक:

- स्पर्धा - भाग-१ (एनसीईआरटी)
- संचयन- भाग-१ (एनसीईआरटी)
- व्याकरण (पी.पी. प्रकाशन)

माह	साहित्य/व्याकरण/लेखन/लेखन	शैक्षणिक क्रिया-कलाप	अधिष्ठित संप्राप्ति
अप्रैल	<ul style="list-style-type: none"> पाठ-२ दुख का अधिकार पाठ-३ एवेस्ट: मेरी शिक्षण यात्रा 	<ul style="list-style-type: none"> किसी व्यक्ति की पहचान उसकी पेशाक से होती है।' विषय पर परिचर्चा आयोजित की जाएगी। तथा बच्चे कीपाल के जीवन की छायाचित्र दिखाई जाएगी। 	<ul style="list-style-type: none"> छात्र दुख शब्द की व्याख्या करने में सक्षम हुए तथा उनके अंदर साहसिक कार्यों के प्रति जिज्ञासु प्रवृत्ति का विकास।
मई	<ul style="list-style-type: none"> पाठ-४ तुम कब आओगे, अतिथि पाठ-९ अब कैसे छुट्टी देना अनुभव, अनुनासिक अनौपचारिक-पत्र अनुच्छेद-लेखन 	<ul style="list-style-type: none"> छात्र अपने घर आए अतिथियों के सत्कार का अनुभव कक्षा में सुनाएँ। सनात्मकता के विकास के लिए अधिकतम लेखन कार्य। 	<ul style="list-style-type: none"> छात्र अपने घर आए अतिथियों के सत्कार प्रक्रिया से परिचित हुए। छात्र ईश्वर के महिमा को जान सकने में समर्थ।
जून	<ul style="list-style-type: none"> सामयिक परीक्षा - १/व्रीष्मावकाश 		
जुलाई	<ul style="list-style-type: none"> पाठ-१० दोहे-रहीम, पाठ-१ गिल्सू (संचयन) उपसर्ग, प्रत्यय 	<ul style="list-style-type: none"> प्रस्तुत दोहों के भावार्थ पर आरंभित चित्र निर्माण गतिविधि। 	<ul style="list-style-type: none"> छात्र रहीम के दोहों का व्याख्या एवं विश्लेषण करने में सक्षम। छात्र गिल्सू के माध्यम से प्राणी संवेदन शीलता को जान सके।

माह	साहित्य/व्याकरण/लेखन/लेखन	शैक्षणिकक्रिया-कलाप	अधिष्ठमसंप्राप्ति
अगस्त	<ul style="list-style-type: none"> पाठ-२ स्मृति (संचयन) संदेश लेखन, संवाद लेखन अपठित गद्यांश 	<ul style="list-style-type: none"> बचपन सपनों की दुनिया होती है। छात्रों को देश के कुछ बहादुर बच्चों की विडियो दिखाई जाएगी। स्वनात्मकता के विकास के लिए अधिकतम लेखन कार्य। 	<ul style="list-style-type: none"> छात्र अपने बचपन के खटे-मीठे अनुभवों की व्याख्या करने में सक्षम हुए।
सितंबर	<ul style="list-style-type: none"> सामयिक परीक्षा-२ पुनरावृत्ति कार्य 		
अक्टूबर	<ul style="list-style-type: none"> पाठ-७ धर्म की आड़ नारा लेखन वाक्य-अर्थ के आधार पर 	<ul style="list-style-type: none"> 'धर्म एकता का माध्यम है।' विषय पर एक पश्चिर्चा आयोजित की जाएगी। स्वनात्मकता के विकास के लिए अधिकतम लेखनकार्य। 	<ul style="list-style-type: none"> छात्र धर्म के वास्तविक महत्व से परिचित हुए।
नवंबर	<ul style="list-style-type: none"> पाठ-१२ एक फूल की चाह-सियाराम शरणगुप्त शब्द और पद तथा शब्दविचार 	<ul style="list-style-type: none"> 'एक फूल की चाह' एक कविता है। इसे एक कहानी के रूप में लिखिए। 	<ul style="list-style-type: none"> छात्र सामाजिक कुटीरियों के प्रतिकार में सक्षम।
दिसंबर	<ul style="list-style-type: none"> सामयिक परीक्षा-३ पाठ-५ हमिद खॉं (संचयन) 	<ul style="list-style-type: none"> 'भरहेदे नफरत की जननी है।' विषय पर एक पश्चिर्चा आयोजित की जाएगी। 	<ul style="list-style-type: none"> छात्र धार्मिक एकीकरण की वास्तविक व्याख्या करने में सक्षम।
जनवरी	<ul style="list-style-type: none"> पाठ-६ दिए जल उठे (संचयन) 	<ul style="list-style-type: none"> पाठ में वर्णित किसी एक नायक के जीवन चरित्र पर आधारित नाटक का कक्षा में मंचन। 	<ul style="list-style-type: none"> छात्र गांधीजी के माध्यम से नेतृत्व कला के गुणों को सीखने में सक्षम हुए।
फरवरी	पुनरावृत्तिकार्य/वार्षिक परीक्षा		
मार्च	पीटीएम/नया सत्रसंभ		

अभिभावक हेतु सुझाव:

- अपनेपाल्य की डायरी प्रतिदिन जाँच करें।
- उच्चारण में शुद्धताहेतु एक हिंदी समाचारपत्र या पत्रिका जरूर लें।
- हिंदी के क्षेत्र में प्रमुख हस्तियों की विडियो तथा 'हिंदी मोटिवेट' कार्यक्रम की विडियो अगर संभव हो तो सप्ताह में एक बार अवश्य दिखाएँ।
- आपके सुझावों का स्वागत है।

भारतक: वार्षिकपरीक्षा

अपठित बोध (१० अंक)	साहित्य (२८ अंक)	व्याकरण (१६ अंक)	लेखन (२६ अंक)
अपठित गद्यांश-१०	<p>स्पर्श के गद्य पाठों के आधार पर अति लघुतरीय प्रश्न 1*1 = 1 अंक</p> <p>स्पर्श के गद्य पाठों के आधार पर लघुतरीय प्रश्न 2*2 = 4 अंक</p> <p>स्पर्श के गद्य पाठों के आधार पर निबंधात्मक प्रश्न 1*4=(४ अंक)</p> <p>स्पर्श के काव्य खंड के आधार पर लघुतरीय प्रश्न 2*2=४अंक</p> <p>स्पर्श के काव्य खंडके आधार पर निबंधात्मक प्रश्न 4*1=(४ अंक)</p> <p>पाठ्य पुस्तक संचयन के निर्धारित पाठों से प्रश्न 3*2= (६ अंक)</p>	<p>शब्द और पद (२)</p> <p>वाक्य-अर्थ के आधार पर (३)</p> <p>अनुस्वार (१)</p> <p>अनुनासिक (१)</p> <p>शब्दविचार (६)</p> <p>उपसर्ग प्रत्यय (३)</p>	<p>अनुच्छेद-लेखन(६)</p> <p>अनौपचारिक-पत्र (५)</p> <p>संवाद-लेखन(५)</p> <p>नारा लेखन(५)</p> <p>संदेश लेखन(५)</p>

SUBJECT: MATHEMATICS

MONTH	CHAPTER/TOPIC	SUBTOPIC	SUGGESTEDACTIVITIES	LEARNING OUTCOMES
APRIL (22)	■ BRIDGE COURSE	<ul style="list-style-type: none"> ■ Number System ■ Addition, Subtraction, Multiplication and Division of different types of numbers ■ Factorisation ■ Algebraic Identities 	<ul style="list-style-type: none"> ■ Activity: Plotting of various types of numbers on number line 	<ul style="list-style-type: none"> ■ Students would have learnt: various types of numbers and arithmetic operations on numbers, representation of numbers on number line
MAY	■ CH-01 NUMBER SYSTEM	<ul style="list-style-type: none"> ■ Introduction., ■ Irrational Numbers., ■ Real Numbers and their Decimal Expansions ■ Representing Real numbers on The Number Line., ■ Operations on Real Numbers ■ Laws of Exponents for Real Numbers 	<ul style="list-style-type: none"> ■ Activity: Square Root Spiral 	<ul style="list-style-type: none"> ■ Students would have learnt: Real Numbers and their Decimal Expansions, Representing real numbers on number line, rationalization, laws of exponents for real numbers
	■ CH-02POLYNOMIALS	<ul style="list-style-type: none"> ■ Introduction ■ Polynomials in One Variable., ■ Zeroes of a Polynomial., ■ Remainder Theorem ■ Factorisation of Polynomials., ■ Algebraic Identities 	<ul style="list-style-type: none"> ■ Activity: To verify the algebraic identity ■ $(a + b)^3 = a^3 + b^3 + 3ab(a + b)$ ■ $(a - b)^3 = a^3 - b^3 - 3ab(a - b)$ 	<ul style="list-style-type: none"> ■ Students would have learnt: Polynomials in One Variable, Zeroes of a Polynomial, Remainder Theorem, Factorisation of Polynomials and Algebraic Identities that are used in real life situations
	■ CH-03 CO-ORDINATE GEOMETRY	<ul style="list-style-type: none"> ■ Introduction ■ Cartesian System ■ Plotting a Point in The Plane if Its Co-ordinates are given. 	<ul style="list-style-type: none"> ■ Activity: Graphical representation of points in the class on graph paper. 	<ul style="list-style-type: none"> ■ Students would have learnt the plotting of numbers on Cartesian plane

MONTH	CHAPTER/TOPIC	SUBTOPIC	SUGGESTEDACTIVITIES	LEARNING OUTCOMES
JUNE	■ CH-04-LINEAR EQUATIONS IN TWO VARIABLES	<ul style="list-style-type: none"> ■ Introduction., ■ Linear Equations., ■ Solution of a Linear Equation., ■ Graph of a Linear Equation in Two Variables., ■ Equation of Lines Parallel to x-axis and y-axis 	<ul style="list-style-type: none"> ■ Activity: Graphical representation in the class on graph paper. 	<ul style="list-style-type: none"> ■ Students would have learnt the representation of a line on graph paper
JULY	■ CH - 6 - LINES AND ANGLES	<ul style="list-style-type: none"> ■ Introduction., ■ Basic Terms and Definitions., ■ Intersecting Lines and Non-intersecting Lines ■ Pairs of Angles., ■ Parallel Lines and a Transversal., ■ Lines Parallel to The Same Line 	<ul style="list-style-type: none"> ■ Activity: Angle sum property proof (by an activity) 	<ul style="list-style-type: none"> ■ Students would have learnt: ■ Intersecting lines and non-intersecting lines, various types of angles, angle sum property of a triangle, Congruence of Triangles ■ Criteria for Congruence of triangles, Some Properties of triangles, Inequalities in a triangle
	■ CH-07 TRIANGLES	<ul style="list-style-type: none"> ■ Angle Sum Property of a Triangle., ■ Introduction., ■ Congruence of triangles., ■ Criteria for Congruence of Triangles., ■ Some Properties of Triangles., ■ Inequalities in a Triangle 	<ul style="list-style-type: none"> ■ Project: Different types of Congruence conditions 	
AUG	<ul style="list-style-type: none"> ■ CH-08 QUADRILATERALS ■ CH-09 AREAS OF PARALLELOGRAMS AND TRIANGLES 	<ul style="list-style-type: none"> ■ Introduction., ■ Angle Sum Property of a Quadrilateral., ■ Types of Quadrilaterals., ■ Properties of a Parallelogram., ■ Another Condition for a Quadrilateral to be a Parallelogram., 	<ul style="list-style-type: none"> ■ Project: Different types of quadrilaterals with properties ■ Activity: Theorems proof with different examples 	<ul style="list-style-type: none"> ■ Students would have learnt: Angle Sum Property of a quadrilateral, types of quadrilaterals, properties of a quadrilateral, the MidPoint Theorem, figures on the same base and between

MONTH	CHAPTER/TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		<ul style="list-style-type: none"> ■ The-Mid Point Theorem., ■ Introduction., ■ Figures on the same Base and Between the same Parallels., ■ Parallelograms on the same Base and between the same Parallels ■ Triangles on the same Base and between the same Parallels 		the same parallels, parallelograms and triangles on the same Base
SEP	■ CH-11 CONSTRUCTIONS	<ul style="list-style-type: none"> ■ Introduction., ■ Basic Constructions., ■ Some Constructions of Triangle 	■ Activity: Construction of different angles and triangles using geometric tools	■ Students would have learnt the construction of different angles and triangles using eometrictools
OCT	<ul style="list-style-type: none"> ■ CH-10 CIRCLES ■ CH-12HERONS-FORMULA 	<ul style="list-style-type: none"> ■ Introduction., ■ Circles and its Related Terms : A Review., ■ Angle Subtended by a Chord at a Point., ■ Perpendicular from the Centre to a Chord., ■ Circle through Three Points., ■ Equal Chords and their Distances from the Centre., ■ Angle Subtended by an Arc of a Circle., ■ Cyclic Quadrilaterals ■ Introduction., ■ Area of Triangle–by Heron’s Formula., ■ Application of Heron’s Formula in finding Areas of Quadrilateral 	■ Activity: Theorem’s proof with the help of working model	■ Students would have learnt: circles and its parts, various theorems related to circle, application of Heron’s formula in finding areas of triangular and quadrilateral shapes related to real life situations

MONTH	CHAPTER/TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
NOV	■ CH-13SURFACEAREAANDVOLUMES	<ul style="list-style-type: none"> ■ Introduction., ■ Surface Area of a Cuboid and a Cube., ■ Surface Area of a Right Circular Cylinder., ■ Surface Area of a Right Circular Cone., ■ Surface Area of a Sphere., ■ Volume of a Cuboid., ■ Volume of a Cylinder., ■ Volume of a Right Circular Cone., ■ Volume of a Sphere 	■ Activity: To obtain the formula for the curved surface area of sphere	■ Students would have learnt the finding of areas and volumes of 3-D solids
DEC	<ul style="list-style-type: none"> ■ CH-14STATISTICS ■ CH-15PROBABILITY 	<ul style="list-style-type: none"> ■ Introduction., ■ Collection of Data., ■ Presentation of Data., ■ Graphical Representation of Data., ■ Measures of Central Tendency., ■ Introduction., ■ Probability–an Experimental Approach 	<ul style="list-style-type: none"> ■ Activity: To draw histogram for classes of equal width and unequal widths., ■ Activity: To find experimental probability of unit’s digit of telephone numbers listed on a page selected at random of a telephone directory. 	■ Students would have learnt: ■ Measure of central tendency, representation of data graphically, probability of happening of an event
JAN-FEB	■ REVISION			

WEIGHTAGE:	
ANNUALEXAMINATIONS(2021–22)	
CHAPTER/UNIT	MARKS(80)
Number System	08
Algebra (Polynomials, Linear equations in two variables)	17
Co- ordinateGeometry	04
Geometry(Lineandangles, Triangles, Quadrilaterals, AreasofParallelogramsandTriangles, Circles, Constructions)	28
Mensuration (Heron’s Formula ,Surface Areas and Volumes)Statistics&	13
Probability	10
TOTAL	80

SUBJECT: SCIENCE

LEARNING OBJECTIVES:

- Encourage and enable students to develop inquiry minds and curiosity about science and the natural world.
- Describe different ways in which science is applied and used to solve local and global problems.
- Evaluate the benefits and limitations of science and scientific applications as well as their effect on life.
- Discuss science and technology is interdependent and assists each other in the development of knowledge and technological applications.

TEXT BOOKS:

- Science - Textbook for class IX - NCERT Publication
- Exemplar Problems Class IX - NCERT Publication
- Kanishk Science Lab Manual

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
APRIL (22) Bridge Classes	<ul style="list-style-type: none"> ■ CH 04: Materials: Metals and non-metals ■ CH 13: Sound ■ CH 08: Cell-Structure and functions 	<ul style="list-style-type: none"> ■ Physical properties of metals and non-metals ■ Chemical properties of metals and non-metals ■ Uses of metal and non-metals ■ Sound is produced by vibrating body ■ Sound produced by humans ■ Sound needs a medium for propagation ■ We hear sound through our ears ■ Amplitude, time period and frequency of a vibration ■ Audible and inaudible sounds ■ Noise, music and Noise pollution ■ Discovery of the cell 	<ul style="list-style-type: none"> ■ To compare physical properties of metals and non-metals. ■ To study reaction of metals and non-metals with oxygen, water, acids and bases. ■ To study displacement reactions. ■ To study sound is produced by vibrating objects. ■ To prepare a simple model of larynx. ■ To study sound needs a medium for propagation. ■ To study structure of human ear with help of a chart/model. ■ To compare amplitude of vibrations of different object. ■ To study unicellular organisms with 	<ul style="list-style-type: none"> ■ The Learner: ■ applies learning of scientific concepts in day-to-day life using appropriate metals and non-metals for various purposes. ■ writes word equation for chemical reactions, e.g., reactions of metals and non-metals with air, water and acids etc. ■ learnt scientific concepts of production and propagation of sound in any medium.

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		<ul style="list-style-type: none"> ■ Unicellular and multicellular organisms ■ Parts of the cell ■ Comparison of plant and animal cells 	<ul style="list-style-type: none"> help of permanent slides. ■ To study structure of an egg. ■ To prepare a slide of onion peel cells and study plant cells. ■ To prepare a slide of human cheek cells. 	<ul style="list-style-type: none"> ■ draws labelled diagram of larynx, human ear etc. ■ distinguishes between different types of sounds produced by various musical instruments. ■ Draw labelled diagram e.g., structure of cell, animal cell, plant cell etc. ■ prepares slides of onion peel cells and human cheek cells.
May (22)	<ul style="list-style-type: none"> ■ CH 01: MATTER IN OUR SURROUNDINGS ■ CH 05 : THE FUNDAMENTAL UNIT OF LIFE ■ CH 08: Motion 	<ul style="list-style-type: none"> ■ Physical nature of matter ■ Characteristics of particles of matter ■ States of matter ■ Can matter change its state? ■ Effect of change of temperature and pressure ■ Evaporation ■ What are living organisms made up of? ■ What is cell made up of? ■ Plasma membrane and cell wall ■ Cell organelles ■ Describing motion ■ Speed with direction ■ Rate of change of velocity 	<ul style="list-style-type: none"> ■ Activity: Make your own cloud in a bottle. ■ Is matter continuous or particulate in nature? ■ Collect information and pictures about scientists who are talking about the five states of matter by surfing on the net compile it in the form of report. ■ Study of properties of solids, liquids and gases by studying the commonly available materials and compiling the differences in the form of a table. ■ Project Report on the study of factors affecting evaporation. ■ Interactive quiz to assess learning 	<ul style="list-style-type: none"> ■ relates processes and phenomena with causes/ effects, ■ differentiates materials/ objects/ / phenomena/ processes, based on properties/ characteristics ■ explains processes and phenomena ■ draws conclusion matter is made up of particles ■ Will be able to differentiate between unicellular and multicellular organisms. ■ Will be able to differentiate between prokaryotes and eukaryotes. ■ Learn about various cell organelles and their functions. ■ understands and evaluate speed. ■ acceleration and distance from various graphs. ■ evaluate speed in circular motion.

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		<ul style="list-style-type: none"> ■ Graphical representation of velocity ■ Equations of motion 	<ul style="list-style-type: none"> ■ Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labelled diagrams ■ To study uniform and non-uniform motion using graph. ■ Mind map activity on various scalar and vector quantities given in the chapter. 	<ul style="list-style-type: none"> ■ represent motion of given situation in graphical manner.
JULY (24)	<ul style="list-style-type: none"> ■ CH 02: IS MATTER AROUND US PURE ■ CH 06: TISSUES ■ CH 09: FORCE AND LAWS OF MOTION 	<ul style="list-style-type: none"> ■ What is a mixture? ■ What is a solution? ■ Separating the components of a mixture ■ Are plants and animals made of same types of tissues? ■ Plant tissues ■ Animals tissues ■ Balanced and unbalanced force ■ First law of motion ■ Second law of motion ■ Third law of motion ■ Conservation of momentum 	<ul style="list-style-type: none"> ■ Preparation of: (a) a true solution (b) a suspension of soil (c) a colloidal solution and distinguish between these on the basis of • transparency • filtration criterion • stability. ■ Preparation of a) a mixture b) a compound using iron filings and sulphur powder and distinguishing between these on the basis of: (i) appearance, i.e., homogeneity and heterogeneity (ii) behavior towards a magnet (iii) behavior towards carbon disulphide as a solvent (iv) effect of heat 	<ul style="list-style-type: none"> ■ applies scientific concepts in daily life and solving problems ■ analyses and interprets properties of components of a mixture to identify the appropriate method of separation ■ calculates using the data given concentration of solution in terms of mass by mass percentage of substances ■ Will learn about different types of plant tissues and their functions. ■ Will be able to differentiate between simple and complex plant tissues. ■ Will be able to learn about different types of animal tissues. ■ differentiate between balanced and unbalanced forces

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
			<ul style="list-style-type: none"> ■ Separation of the components of a mixture of sand, common salt and ammonium chloride (or camphor). ■ Identification of Parenchyma, collenchyma and Sclerenchyma tissues in plants from prepared slides. Draw their labeled diagrams. Identification of striped, smooth and cardiac muscle fibers and nerve cells in animals from prepared slides. Draw their labeled diagrams. ■ To demonstrate law of inertia using a five-rupee coin, stiff card and an empty class tumbler. ■ To demonstrate third law of motion using spring balances. 	<ul style="list-style-type: none"> ■ evaluate the numerical value of force and momentum. ■ explain the laws of motion in various situations.
AUGUST (23)	<ul style="list-style-type: none"> ■ CH 02: IS MATTER AROUND US PURE (Contd...) ■ CH15: IMPROVEMENT IN FOOD RESOURCES ■ CH10: GRAVITATION 	<ul style="list-style-type: none"> ■ Physical and chemical changes ■ What are the types of pure substances? ■ To prepare compost at home. ■ To study different methods of irrigation. ■ Gravitation ■ Universal law of gravitation ■ Thrust and pressure ■ Archimedes' Principle 	<ul style="list-style-type: none"> ■ Perform the following reactions and classify them as physical or chemical changes : (a) Iron with copper sulphate solution in water (b) Burning of magnesium ribbon in air (c) Zinc with dilute sulphuric acid (d) Heating of copper sulphate crystals (e) Sodium sulphate with barium chloride in the form of their solutions in water ■ To prepare compost at home. ■ To study different methods of irrigation. ■ Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder. 	<ul style="list-style-type: none"> ■ differentiates materials/ phenomena/ processes based on properties/ characteristics ■ Learn the three main practices for improving crop yield ■ Understand how Biotic and Abiotic factors affect crop production. ■ Learn about the different desirable agronomic characteristics. ■ Differentiate between manure and fertilizers and the

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		<ul style="list-style-type: none"> Relative velocity 	<ul style="list-style-type: none"> Establishing the relation between the loss in weight of a solid when fully immersed in a) tap water b) strongly salty water, with the weight of water displaced by it by taking at least two different solids. 	<ul style="list-style-type: none"> importance of irrigation and following specific cropping pattern. evaluate the numerical value of g at different places like earth and moon. calculate the weight of given object on moon and earth. solve numerical problems based on thrust and pressure. calculate the density of a given solid. understand if object will float or sink on the basis of relative density.
SEPTEMBER (23)	<ul style="list-style-type: none"> Revision 			
OCTOBER (21)	<ul style="list-style-type: none"> CH04 :STRUCTURE OF THE ATOM CH 14 :NATURAL RESOURCES CH 11: WORK AND ENERGY 	<ul style="list-style-type: none"> Charged particles in matter The structure of an atom How electrons are distributed in different orbits? Valency Atomic number and mass number The breath of life : Air Water : A wonder liquid Biological cycle 	<ul style="list-style-type: none"> To prepare a report on the discovery of various sub atomic particles To study various natural resources around us. To demonstrate potential and kinetic energy stored in various daily life situations. To study different forms of work done. To study the relationship between work done and power. 	<ul style="list-style-type: none"> Draw labelled diagrams showing distribution of electrons in different orbits calculates using the data given the number of neutrons form mass number and atomic number, valency form atomic number describes experiments of Thomson , Rutherford define natural resources distinguish between different types of natural resources Will learn about oxygen cycle, carbon cycle and nitrogen cycle. understand the meaning of work

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		<ul style="list-style-type: none"> Work and energy Potential energy Law of conservation Rate of doing work 		<ul style="list-style-type: none"> according to science. comprehend various examples showing transformation of energy. derive expression of KE and PE. understand different types of energy.
NOVEMBER (18)	<ul style="list-style-type: none"> CH 03 : ATOMS AND MOLECULES CH 07 DIVERSITY IN LIVING ORGANISMS CH 12: SOUND 	<ul style="list-style-type: none"> Laws of chemical combination What is an atom? What is a molecule? Writing chemical formulae Molecular mass Mole concept What is the basis of classification? Classification and evolution The hierarchy of classification groups Plantae Animalia Nomenclature Production of sound Sound a medium to travel Reflection of sound 	<ul style="list-style-type: none"> Verification of the law of conservation of mass in a chemical reaction. Study of the characteristics of Spirogyra, Agaricus, Moss, Fern, Pinus (either with male or female cone) and an Angiospermic plant. Draw and give two identifying features of the groups they belong to. Observe the given pictures/ charts/models of earthworm, cockroach, and bird. Study of the external features of root, stem, leaf and flower of monocot and dicot plants. Verification of the Laws of reflection of sound using mirror, pipes, cardboard and clock. 	<ul style="list-style-type: none"> uses scientific symbols/ equations to represent quantities/ elements/ unit describes experiments of Lavoisier communicates the findings and conclusions effectively. Experience the diversity of living things. classify living things into six kingdoms : Eubacteria, Protista, Fungi, Plantae and Animalia; Archaeobacteria,. characteristics of the kingdoms. understand how the sound is produced and propagates. understand different types of waves and their characteristics. know about condition that is required for echo to take place.

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
DECEMBER (23)	<ul style="list-style-type: none"> ■ CH 03 : ATOMS AND MOLECULES (Contd.) ■ CH 13 : WHY DO WE ILL ■ CH 12: SOUND (Contd.) 	<ul style="list-style-type: none"> ■ Mole concept contd.. ■ Health and its failure ■ Disease and its causes ■ Infectious diseases ■ Principles of treatment ■ Structure of human ear ■ Functions of various parts of human ear. 	<ul style="list-style-type: none"> ■ A quiz mole market to reinforce understanding of concept ■ To study the causes, symptoms, and preventions of different diseases. ■ To understand the working of human ear with the help of charts/ models. 	<ul style="list-style-type: none"> ■ calculates using the data given number of moles in a given mass of substance ■ relates processes and phenomena with causes and effects, such as, symptoms with diseases and causal agents ■ explains processes and phenomena, such as, spread of diseases and their prevention ■ applies scientific concepts in daily life and solving problems, such as, takes preventive measures to control disease causing agents, etc. ■ understand the working of human ear.
JANUARY (18)			■ Revision - Annual Examination	
FEBRUARY(19)			■ Revision - Annual Examination	
JANUARY (18)			■ Annual Examination	

Suggestion to parents:

- Motivate your child to Read NCERT thoroughly on daily basis.
- Good timetable will make the study easy.
- Sufficient time should be devoted to self-study.
- Help the child to solve exemplar problems after the completion of each chapter.

Weightage:

(Annual Examination)

UNIT	NAME	MARKS
I	Matter - Its Nature and Behaviour	23
II	Organisation in the Living World	20
III	Natural Phenomenon	27
IV	Our Environment	06
V	Food; Food Production	04
	TOTAL	80
	Internal assessment	20
	Grand Total	100

SUBJECT: SOCIAL SCIENCE

LEARNING OBJECTIVES:

- To demonstrate knowledge of historical and contemporary issues of Social Science.
- To recognize ways in which political, social and economic issues affect their daily lives across time and space.
- To gain a sense of the working of Indian democracy, its institutions and processes at the local, state and union levels.

TEXT BOOKS:

■ NCERT LATEST SYLLABUS BOOKS

- GEOGRAPHY : CONTEMPORARY INDIA-I
- POLITICAL SCIENCE : DEMOCRATIC POLITICS -I
- HISTORY : INDIA AND THE CONTEMPORARY WORLD-I
- ECONOMICS : ECONOMICS

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
APRIL [22]	■ INDIA- SIZE AND	<ul style="list-style-type: none"> ■ Location of India ■ Size of India 	■ Map showing longitudinal and Latitudinal extent, North South	■ Students learn about the India and its location and its importance in the

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	■ LOCATION	■ India and the World., ■ India's contact with the World., ■ India's Neighbours	extent and neighbouring countries.	world.
	■ PHYSICAL FEATURES OF INDIA	■ Theory of Plate Tectonics ■ Effect of Plate Tectonics on Indian Landform., ■ Major Physiographic divisions ■ The Himalayan Mountains ■ The Northern Plains ■ The Peninsular Plateau ■ The Indian Desert ■ The Islands	■ Map showing various physical divisions of India and video will clear the concept of Plate tectonic theory	■ The learner recognises and retrieves facts, figures and narrates processes, for example, • locates physical features on the map of India. ■ recognises and describes different physical features of India.
	■ FRENCH REVOLUTION	■ Causes of French Revolution ■ French Society during the late Eighteenth Century ■ Depleting Resources ■ The Struggle to Survive ■ A growing of the middle class	■ Video will show the France and its ■ Revolution and the changes that came in the society	■ Meaning of Revolution and it started ■ Reasons for the outbreak of revolution in France and who participated and its impact on world.
MAY[23]	■ WHAT IS DEMOCRACY? WHY ■ DEMOCRA- CY?	■ What are the different ways of defining democracy? ■ Why has democracy become the most prevalent form of government in our times?	■ Relating the history and Political Science with each other to make the concept clear about democracy and why it was required to have democratic type of Government.	■ Meaning of democracy and why we people want democracy in our country.

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	■ CONSTI- TUTIONAL DESIGN	■ How and why did India become a democracy? ■ How was the Indian Constitutional framed? ■ What are the salient features of the Constitution?	■ Class activity showing different types of ■ democracy and its role.	■ How and why did India become a democracy? ■ How was the Indian Constitutional framed? ■ What are the salient features of the Constitution?
	■ THE STORY OF VILLAGE ■ PALAMPUR	■ Economic transactions of Palampur	■ Activities mentioned in the chapter	■ The discussion on factors of production i.e to land, labour, physical capital and human capital ■ visualises the village economy as a self-organizing entity ■ familiarises about different economic agents and their role in the village economy
JUNE [05]	■ PT -1		■ Prepare a project as per HHW	
JULY[24]	■ SOCIALISM IN EUROPE AND THE RUSSIAN ■ REVOLU- TION	■ The age of social change ■ Liberals ,radicals and conservatives., ■ Industrial society and social change ■ Causes of Russian revolution., ■ The February revolution in Petrograd ■ The revolution of October 1917., ■ Stalinism and collectivization	■ Students will come to know about the ■ socialism and its benefits with the help of a flow chart.	■ The classifies and compares relevant information data/events pertaining to the February and October Revolution ■ The learner identifies reasons for participation of different sections of society in the February Revolution of 1917.

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	■ DRAINAGE	■ The drainage system in India., ■ The Himalayan rivers(the Indus., ■ the Ganga and the Brahmaputra), •Pen- insular river system		■ Students learn about the drainage system in India ■ The Himalayan rivers(the Indus, the Ganga and the Brahmaputra)
	■ PEOPLE AS RESOURCE	■ Human capital ■ Economic activities by men and women ■ Quality of population ■ Unemployment		■ The students learn about the meaning of Human capital ■ Economic activities by men and women ■ Quality of population
AUG[23]	■ CLIMATE	■ Variations in India's climate., ■ Climatic controls ■ Factors affecting India's climate., ■ The Indian monsoon., ■ The onset of the monsoon and the withdrawal., ■ The seasons	■ Students will come to know about the climate and weather of India and how they affect the human and Indian economy with the help of videos shown on Monsoon.	■ Students will learn about the meaning of Climate and Weather ■ Variations in India's climate ■ Climatic controls ■ Factors affecting India's climate ■ The Indian monsoon
	■ NAZISM AND THE RISE OF HITLER	■ Birth of the Weimar republic., ■ The effects of the war ■ Political radicalism and economic crises ■ The years of depression ■ Hitler's rise to power ■ The Nazi worldview ■ End of world war II		■ The students learn about the rise of Hitler Role of WWI in the rise of Nazism Birth of the Weimar republic., ■ The effects of the war., ■ Political radicalism and economic crises., ■ The years of depression., ■ Hitler's rise to power ■ The Nazi worldview ■ End of world war II

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
SEPT[23]	■ NATURAL VEGETATION AND WILD-LIFE	■ Biodiversity in India ■ Climate ■ Ecosystem ■ Types of vegetation ■ Wildlife	■ Video will show them and understand the students about the flora and fauna of India and the steps taken by government for their protection	■ vegetation and wildlife in India ■ Why they are important in our daily life., ■ Measures taken by government to protect them., ■ Biodiversity in India., ■ Climate., ■ Ecosystem., ■ Types of vegetation, ■ Wildlife
	■ POPULATION	■ Population size and distribution ■ Population growth and processes of population change ■ Occupational structure ■ Population policies	■ Map activity will be done.	■ Students learn about the Population size and distribution and what kind of population leads to economic growth. ■ Population growth and processes of population change ■ Occupational structure ■ Population policies.
	■ ELECTORAL POLITICS	■ Why do we need elections? ■ What makes an election democratic? ■ What is our system of elections? ■ Unfair practices in elections ■ What makes elections in India democratic? ■ Challenges to free and fair elections		■ Student will learn about ■ What are election? ■ Why do we need elections? ■ What makes an election democratic? ■ What is our system of elections? ■ Challenges to free and fair elections

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
OCT [21]	■ WORKING OF INSTITUTIONS	■ How is a major policy decision taken? ■ Need for political institutions ■ Parliament and Judiciary	■ Students will come to know about the working of the Parliament and the powers of Judiciary in India through a role play.	■ The students will learn about ■ Meaning of institution ■ How is a major policy decision taken? ■ Need for political institutions ■ Parliament and Judiciary
	■ DEMOCRATIC RIGHTS	■ Life without rights ■ Rights in democracy ■ Rights in the Indian constitution ■ Expanded scope of rights	■ Students will come to know about rights and their importance in daily life and why they are necessary through videos.	■ The students will learn about the democratic form of government demonstrates different ways of highlighting Democratic Rights., ■ Explains Amnesty International ■ describes Bill of Right., ■ explains the role of National Human Right Commission
NOV [18]	■ FOREST SOCIETY AND COLONIALISM	■ Importance of forests ■ Why deforestation ■ The rise of commercial forestry., ■ Rebellion in the forest., ■ Forest transformation in Java ■ War and deforestation ■ New developments in forestry		■ Students will learn Importance of forests ■ Why deforestation? ■ The rise of commercial forestry ■ Rebellion in the forest ■ Forest transformation in Java
	■ POVERTY AS A CHALLENGE	■ Meaning of poverty ■ Poverty line ■ Causes of poverty ■ Anti-poverty measures	■ Students will come to know about ■ poverty and the measures to remove it and the ill effects of the poverty.	■ Meaning of poverty ■ Poverty line ■ Causes of poverty ■ Anti-poverty measures

MONTH	CHAPTER/ TOPIC	SUBTOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	■ FOOD SECURITY IN INDIA	■ What is food security? ■ Why food security? ■ Who are foods insecure? ■ India is aiming at self-sufficiency., ■ in food grains since., ■ independence	■ Students will also come to know about., ■ the food insecurity and they will understand the importance of food in their life and the relation between poverty and food insecurity.	■ What is food security? ■ Why food security? ■ Who are foods insecure? ■ India is aiming at self-sufficiency in food grains since independence.
DEC [23]	REVISION OF THE SYLLABUS IN THE CLASS WITH MAPS			
JAN [18]	REVISION OF THE SYLLABUS IN THE CLASS WITH MAPS			
FEB [19]				

SUGGESTIONS TO THE PARENTS:

- Emphasize critical thinking and discuss concepts focusing practical learning with them.
- Take your children to fun and interesting places like planetariums, zoos, wildlife sanctuaries, national parks, museums, botanical gardens, etc. to make the concepts clear.

WEIGHTAGE:

WEIGHTAGE	FINALS	FINALS MARKS WEIGHTAGE
TOTAL NO. OF CHAPTERS/MARKS	19	80
HISTORY	04	20
GEOGRAPHY	06	20
CIVICS	05	20
ECONOMICS	04	20

**Curiosity is the fuel for discovery,
inquiry and Learning...**



SWARNPRASTHA PUBLIC SCHOOL

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