

# **SWARNPRASTHA PUBLIC SCHOOL, SONIPAT**

*Under the aegis of Indraprastha Education and  
Charitable Society*

## **SYLLABUS 2021-22**

### **CLASS- X**



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 and 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 and use appropriate words and expressions
- Use English as a means of communication and pronounce English correctly.
- Ask Questions for developing critical thinking

**WRITING SKILL:**

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

**READING SKILL:**

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

**TEXT BOOKS:**

1. PROSE-FIRST FLIGHT

2. SUPPLEMENTARY READER- FOOT PRINTS WITHOUT

Discussion on various means of ■ communication. ■ Read about the life of Nelson Mandela

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
APRIL (22)		BRIDGE COURSE ■ Determiners (2) ■ Tenses (4)	BRIDGE COURSE ■ Paragraph writing (1)	■ PPT & Digital Content would be shared., ■ Story writing >>>>>> Develop a story using the clues. With correct usage of tense.	■ Students will learn to write sentences and paragraph coherently. ■ Write answers to Textual questions

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
				<ul style="list-style-type: none"> <li>■ Interactive Session &gt;&gt; To give examples using the tense chart.,</li> <li>■ Brainstorming &gt;&gt; The class would start with a discussion on.,</li> <li>■ News Headlines from Newspaper-highlighting the verb.</li> </ul>	<p>correctly.</p> <ul style="list-style-type: none"> <li>■ Creative writing.</li> </ul>
APR (22)	<ul style="list-style-type: none"> <li>■ Ch1. A Letter to God(3)</li> <li>■ Ch2. Nelson Mandela(3)</li> <li>■ Poem1. Dust of Snow(2)</li> <li>■ Poem2. Fire and Ice(2)</li> <li>■ Ch3. Two Stories about Flying(4)</li> </ul>	BRIDGE COURSE ■ Voice (3) ■ Subject Verb ■ Concord (3)	BRIDGE COURSE ■ Analytical Paragraph(2)	<ul style="list-style-type: none"> <li>■ Students will be made to find a passage in the newspaper and comprehension will be made to do through it.,</li> <li>■ Enable the students to understand the concept of racial discrimination and apartheid system in South Africa. Research work on Nelson Mandela.,</li> <li>■ Brain Storming –The class would start with a discussion on –Have you ever been alone or away from home DURING A NATURAL CALAMITY? Narrate your experience.,</li> <li>■ No matter how ordinary or unimportant an incident may be, it's the reaction or the response that matters.,</li> <li>■ Taking inspiration from the poet's reaction write how inherent values can be picked up and learnt.</li> </ul>	<ul style="list-style-type: none"> <li>■ Identify the elements of a letter. Apply the elements to compose a personal letter.,</li> <li>■ Importance of the impact of racial discrimination. Understanding the importance love over hate. Enable the students to understand the difference between Autobiography and Biography.,</li> <li>■ Students will learn to analyse the situation with courage and confidence after reading Two stories about flying.</li> <li>■ To inspire them write their feelings in the form of short poems.,</li> <li>■ To enable the students to read aloud the poem with proper rhythm and intonation.,</li> <li>■ To make the students to understand the thought and imagination contained in the poem. Examine the role of nature in one's life.</li> </ul>

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
<b>MAY (22)</b>	<ul style="list-style-type: none"> <li>■ Ch4.From the Diary of Anne Frank (4)</li> <li>■ Ch5.The Hundred Dresses-I(3)</li> <li>■ Ch6. The Hundred Dresses -II(3)</li> <li>■ Poem3. A Tiger in the Zoo(2)</li> <li>■ Poem4. How to Tell Wild Animals(2)</li> </ul>	<ul style="list-style-type: none"> <li>■ Reported Speech(4)</li> </ul>	<ul style="list-style-type: none"> <li>■ Formal Letter(3)</li> <li>■ Analytical Paragraph(1)</li> </ul>	<ul style="list-style-type: none"> <li>■ The teacher begins the class by asking as to how many of them have the habit of writing diary. The teacher gives the details of Anne Frank and-about the diary which she had written. Suggested reading Diary of a Young Girl., ■ Group Discussion on saving animals will be done. Topic- How to protect the animals and our duties towards them., ■ Analyse the character traits that Wanda's classmates were looking for in their classmates. Group activity of Students describing wild animals and others identifying them.</li> </ul>	<ul style="list-style-type: none"> <li>■ Student's will get to know about the consequences of World War-2.</li> <li>■ Knowledge about history.</li> <li>■ Importance of talents and nor possessions</li> <li>■ They understand the different poetic devices used inthe poem.</li> <li>■ Understand the plight of animals in captivity. Understand the importance of freedom. Understand the use of adjectives in the poem.</li> </ul>
<b>JUN(5)</b>	<b>■ REVISION((P.T-1 EXAMINATION)</b>				
<b>JUL (24)</b>	<ul style="list-style-type: none"> <li>■ Ch7. Glimpses ofIndia (6)</li> <li>■ Ch8. Mijbil theOtter (3)</li> <li>■ Ch9. Madam Rides theBus (3)</li> </ul>	<ul style="list-style-type: none"> <li>■ Clauses Noun Clause, Adverb Clause of condition, Relative Clauses (3)</li> </ul>	<ul style="list-style-type: none"> <li>■ Revision-Letter Writing(1)</li> </ul>	<ul style="list-style-type: none"> <li>■ Proof reading activity will be done with the students by giving them paragraphs with errors.</li> <li>■ Travel Brochure activity will be taken.</li> </ul>	<ul style="list-style-type: none"> <li>■ Children are able to learn and appreciate culturaldifferences existing in our country. Critically analyse the importance of knowing ourcountry.Children learn to appreciate the "Dignity</li> </ul>

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	<ul style="list-style-type: none"> <li>■ Ch10. The Sermon atBenares(4)</li> <li>■ Poem5. The BallPoem (2)</li> <li>■ Poem6.Amanda (2)</li> </ul>			<ul style="list-style-type: none"> <li>■ Discussion on the theme, "There are some people who live in adream world, and there are some who face reality; and then there are those who turn one into the other" and write their view point in one paragraph.</li> <li>■ Collection of pictures of Lord Buddha and his preachings, discussion on the lesson's message.</li> <li>■ Discussion on Epistemology of loss- the knowledge about the reality of loss in life.</li> <li>■ Critically analyse the importance of freedom for teenagers.</li> </ul>	<ul style="list-style-type: none"> <li>of Labour"and respect the profession of a baker.</li> <li>■ To help understand relation between humanbeings and animals and things that they should takecare of before keeping a pet.</li> <li>■ Develop sensitivity to the feelings and emotions of others and develop empathy for the character.</li> <li>■ Students are sensitised to the fact that death is the ultimate truth in the world.Grieving on the death of a relative bringsnothing. It only invites physical pain.</li> <li>■ Figures of speech. The idea of loss. Money is external.</li> </ul>
<b>AUG (23)</b>	<ul style="list-style-type: none"> <li>■ Ch11. TheProposal (4)</li> <li>■ Poem7. Animals (2)</li> <li>■ Poem8. TheT-rees (2)</li> <li>■ Poem9.Fog (2)</li> <li>■ Poem10. The</li> </ul>	<ul style="list-style-type: none"> <li>■ Clauses Noun Clause, Adverb Clause of condition, Relative Clauses (3)</li> <li>■ Editing (2)</li> <li>■ Omissions</li> <li>■ Sentence Reordering</li> <li>■ Gap-Filling</li> </ul>	<ul style="list-style-type: none"> <li>■ Revision-LetterWriting(1)</li> <li>■ Dialogue writing (2)</li> </ul>	<ul style="list-style-type: none"> <li>■ Spell Beeactivity</li> <li>■ Read through the play carefully, and find expressions that youthinkare not used in contemporary English, and contrast these with idiomatic modern English expressions that also occur in the play.</li> </ul>	<ul style="list-style-type: none"> <li>■ Understand the importance of values in life. Understanding marrying someone only foreconomic security doesn't work. Critically examining the choices offered by life.</li> <li>■ After completion of this poetry students will learn not to</li> </ul>

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	Tale of Custard the Dragon (3) REVISION for P.T-2(5)			<ul style="list-style-type: none"> <li>Poem composition and students will be asked to note down their strengths and weaknesses.</li> <li>Discussion on Pets and their behavioural patterns in various situations.</li> </ul>	judge and look down others and never underestimate themselves. Identifies and appreciates significant literary elements such as – metaphor, imagery, symbol, simile, onomatopoeia, intention/point of view, rhyme scheme etc. Students will learn about the importance of effective communication.
<b>SEP (23)</b>	<ul style="list-style-type: none"> <li>Poem 1. For Anne Gregory (3)</li> <li>S.R-1. A Triumph of Surgery (3)</li> <li>2. The Thief's Story (3)</li> <li>REVISION for P.T 2 (5)</li> </ul>	<ul style="list-style-type: none"> <li>Prepositions (3)</li> <li>Modals (3)</li> </ul>	<ul style="list-style-type: none"> <li>Revision-Letter Writing (1)</li> <li>Dialogue writing (2)</li> </ul>	<ul style="list-style-type: none"> <li>Activity- Listening Skills</li> <li>Healthy eating &amp; exercise are important for good health.... Express your views in 80-100 words using the following words from the lesson... bloated sausage, listless, lithe, distraught, toiled.</li> <li>Debate on the topic that Love, human values and education can transform even a thief.</li> </ul>	<ul style="list-style-type: none"> <li>Gain the Knowledge of different kinds of pet animals. Understand Dog as the most faithful pet., understand the thief's behavior with unknown people. learn how a person can motivate to change his nature and become capable of making decisions, judgments and inference. Students will learn human values and relations are important in life .</li> </ul>
<b>OCT (21)</b>	<ul style="list-style-type: none"> <li>3. The Midnight Visitor (3)</li> <li>4. A Question of Trust (3)</li> </ul>	<ul style="list-style-type: none"> <li>Editing (3)</li> <li>Omissions</li> <li>Sentence Reordering</li> </ul>	<ul style="list-style-type: none"> <li>Revision-Article Writing (3)</li> </ul>	<ul style="list-style-type: none"> <li>Students can be divided into two groups and they may be guided to prepare dialogues based on the text. They may</li> </ul>	<ul style="list-style-type: none"> <li>Students will try to imbibe the alertness and presence of mind exhibited by the detective Ausable.</li> </ul>

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	<ul style="list-style-type: none"> <li>5. Footprints without Feet (3)</li> <li>6. The Making of a Scientist (4)</li> </ul>	<ul style="list-style-type: none"> <li>Gap-Filling</li> </ul>	<ul style="list-style-type: none"> <li>Revision-Short Story (2)</li> </ul>	<ul style="list-style-type: none"> <li>be guided to select students to play various roles in enacting the lesson 'The Midnight Visitor.', 'Speech' they may wish to read the texts of well-known speeches such as Nehru's 'Tryst with Destiny' and how the lives of such people motivate us to do better.</li> <li>Comprehension based questions will be asked and the answers will be elicited from the students. An open-ended discussion on the fairness of Horace Danby's incarceration followed by writing tasks., Matching the name of scientists with their discoveries/inventions</li> </ul>	<ul style="list-style-type: none"> <li>To enable them to judge if the science is boon or bane. To learn the central idea of the lesson. to enable them to compare and contrast the scientists with griffin.</li> <li>To enable them to think imaginatively and creatively</li> </ul>
<b>NOV (18)</b>	<ul style="list-style-type: none"> <li>7. The Necklace (3)</li> <li>8. The Hack- Driver (3)</li> <li>9. Bholi (3)</li> <li>10. The Book-that Saved</li> </ul>	<ul style="list-style-type: none"> <li>Editing (3)</li> <li>Omissions</li> <li>Sentence Reordering</li> <li>Gap-Filling</li> </ul>	<ul style="list-style-type: none"> <li>Revision-Letter Writing (1)</li> <li>Revision-Article Writing (1)</li> </ul>	<ul style="list-style-type: none"> <li>Activity-Speaking Skills</li> <li>-A discussion on the importance of being satisfied.</li> <li>Group discussion on social evils like dowry system, gender discrimination and understand their role in making such evils eradicate from</li> </ul>	<ul style="list-style-type: none"> <li>To inculcate the values of wisdom and being satisfied.</li> <li>understand that one should not be knave when dealing with people as appearances are deceptive.</li> <li>The importance of education. The need for empowering</li> </ul>

MONTH	LITERATURE	GRAMMAR	WRITING SKILLS	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
				our society.	women. The importance of family support for children. The need for emotional support of elders for children. The role of teacher as a mentor. The importance of social support for children/people who are differently abled
DEC (22)	■ Revision for- PREBOARD-I	■ Editing ■ Omissions ■ Sentence Reordering ■ Gap-Filling	■ Revision- Complaint- letter ■ Revision-Letter of Inquiry		
JAN(18)	■ PREBOARD REVISION				
FEB(4)	■ PREBOARD REVISION				

#### SUGGESTIONS TO THE PARENTS:

- Parents should try to speak English at home at some point each day.
- Encourage your ward to continue to read for pleasure in their own language even while learning English.
- Encourage your ward to watch appropriate English language television programmes or DVDs
- Help them to use the internet to find and access websites with ESL practice activities.
- Remember the Basics! Practice makes perfect!
- Establish a good study routine.

WEIGHTAGE:		
SECTION-A	Reading Skills	20
SECTION-B	Writing Skills with Grammar	30
SECTION-C	Literature Textbook and Extended Reading Text	30
TOTAL		80

#### SYLLABUS – HINDI (कोर्स-B)

##### शिक्षण उद्देश्य-

- विद्यार्थियों को दैनिक जीवन में हिंदी में समझने-बोलने के साथ-साथ लिखने की क्षमता का विकास करना।
- संघर्ष 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 नत भाषा को साथ रखकर हिंदी की संघनाओं की समझ बनाना।

##### पाठ्यपुस्तक:

- स्पर्श- भाग-२ (एनसीईआरटी)
- संघर्ष- भा.-२ (एनसीईआरटी)
- व्याकरण (पी. पी. प्रकाशन)

माह	साहित्य/व्याकरण/लेखन/अपठित	शैक्षणिकक्रिया-कलाप	अधिस्त्रमसंप्राप्ति
मार्च	■ पाठ-१ साखी-कबीर ■ पाठ-१ बड़े भाईसाहब ■ मुहावरे	■ 'क्या परीक्षा पास कर लेना ही योग्यता का आधार है।' विषय पर एक परस्पर्धा आयोजित की जाएगी।	■ छात्र कबीर की साखियों का भाव विश्लेषण करने में सक्षम हुए तथा दो भाईयों के अंतः संबंध से परिचित हुए।
अप्रैल	■ पाठ-३ तर्क-वामीरिकाथा ■ समाप्त	■ स्वतंत्रता संग्राम के किसी एक पसंदीदा नायक का चित्र व्याकरण की नोटबुक में चिपकाकर, एक अनुच्छेद लिखकर लाना है।	■ छात्र लोककथाओं के महत्व को जान सके तथा समाप्त निर्माण प्रक्रिया को समझ सके।

माह	साहित्य/व्याकरण/लेखन/अपठित	शैक्षणिकक्रिया-कलाप	अधिस्त्रमसंप्राप्ति
मई	<ul style="list-style-type: none"> <li>पाठ-२ पद-मीराबाई</li> <li>पदबंध</li> <li>वाक्य-रचना के आधारपर</li> </ul>	<ul style="list-style-type: none"> <li>छोहों का चित्रांकन</li> </ul>	<ul style="list-style-type: none"> <li>छात्र मीरा के पद का भाव विश्लेषण करने में सक्षम हुए तथा पदबंध की संरचना को समझ सके।</li> </ul>
जून	<ul style="list-style-type: none"> <li>सामयिकपरीक्षा - 1/ग्रीष्मावकाश</li> </ul>		
जुलाई	<ul style="list-style-type: none"> <li>पाठ-४ मनुष्यता-मैथिलीशर्मगुप्त</li> <li>पाठ-५ पर्वत प्रदेश में पावस-सुमित्रा नंदन पंत</li> </ul>	<ul style="list-style-type: none"> <li>दिए गए प्राकृतिक शब्दों के सहयोग से काव्य रचना कार्य कराया जाएगा।</li> </ul>	<ul style="list-style-type: none"> <li>छात्र वर्षा ऋतु में पर्वतीय प्रदेश के मौसम परिवर्तन का अनुमान लगाने में सक्षम।</li> </ul>
अगस्त	<ul style="list-style-type: none"> <li>पाठ-६ अब कहाँ हमारे के दुख से दुखी होने वाले</li> <li>पाठ-७ पतझर में टूटी पत्तियाँ</li> <li>पाठ-१ हरिहर काका (संघन)</li> <li>अपठित गद्यांश,</li> <li>अनुच्छेद-लेखन</li> <li>औपचारिक-पत्र</li> </ul>	<ul style="list-style-type: none"> <li>'पतझर में टूटी पत्तियाँ पाठ में वर्णित 'टी-सेमनी' का शब्दचित्र प्रस्तुत कीजिए।</li> </ul>	<ul style="list-style-type: none"> <li>छात्र प्रकृति के महत्व से परिचित हुए तथा ग्रामीण सामाजिक जीवन को जान सके।</li> </ul>
सितंबर	<ul style="list-style-type: none"> <li>सामयिकपरीक्षा-२ पुनरावृत्तिकार्य</li> <li>पाठ-२ अपनेके-सेदिन (संघन)</li> </ul>	<ul style="list-style-type: none"> <li>छात्र के बीच प्राचीन शिक्षा पद्धति और वर्तमान प्राचीन शिक्षा पद्धति पर वाद-विवाद का आयोजन।</li> </ul>	
अक्टूबर	<ul style="list-style-type: none"> <li>पाठ-३ टोपी थुक्ला (संघन)</li> <li>पाठ-८ करतूस</li> <li>सूचना लेखन</li> <li>विज्ञापन लेखन,</li> <li>लघु कथा लेखन</li> <li>सामयिकपरीक्षा-३</li> </ul>	<ul style="list-style-type: none"> <li>सैनिक जीवन की चुनौतियों पर आधारीत, क अनुच्छेद लिखिए।</li> <li>एनसीईआरटी द्वारा कैफ़ी आजमी पर बनाई गई फिल्म दिखाई जाएगी।</li> </ul>	<ul style="list-style-type: none"> <li>छात्रों के अंदर एकांकी कला का विकास और धार्मिक एकीकरण की भावना में वृद्धि।</li> </ul>

माह	साहित्य/व्याकरण/लेखन/अपठित	शैक्षणिकक्रिया-कलाप	अधिस्त्रमसंप्राप्ति
नवंबर	<ul style="list-style-type: none"> <li>पाठ-८ कर चले हम फिदा-कैफ़ी आजमी</li> </ul>	<ul style="list-style-type: none"> <li>'सिनेमा का समाज पर प्रभाव' विषय पर एक परिचर्चा आयोजित की जाएगी।</li> </ul>	<ul style="list-style-type: none"> <li>छात्रों के अंदर देशभक्ति की भावना का विकास।</li> </ul>
दिसंबर	<ul style="list-style-type: none"> <li>पुनरावृत्ति कार्यप्री-बोर्ड-१</li> </ul>		
जनवरी	<ul style="list-style-type: none"> <li>पुनरावृत्ति कार्यप्री-बोर्ड-२</li> </ul>		
फरवरी	<ul style="list-style-type: none"> <li>पुनरावृत्ति कार्य/वार्षिक परीक्षा प्रारंभ</li> </ul>		

**अभिभावकहेतुसुझाव:**

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

**भारतक: वार्षिक परीक्षा**

खण्ड-अवस्तुपरक (४० अंक)	खण्ड-अवर्णनात्मक (४० अंक)
अपठित गद्यांश १-१*५=५ अपठित गद्यांश २-१*५=५ वाक्य-रचना के आधार पर १*४=४ पदबंध १*४=४ समास १*४=४ मुहावरे १*४=४ पठितकाव्यांश - १*४=४ पठितगद्यांश १-१*५=५ पठितगद्यांश २-१*५=५	पाठ्यपुस्तक स्पर्श के निर्धारितपाठ से प्रश्न २*२= (४ अंक) स्पर्श के निर्धारितपाठ से प्रश्न ४*१= (४ अंक) संघन के निर्धारितपाठ से प्रश्न ३*२= (६ अंक)  अनुच्छेद-लेखन (६) औपचारिक-पत्र (५) सूचना लेखन (५) विज्ञापन लेखन(५) लघुकथा लेखन (५)

**SUBJECT: MATHEMATICS**

MONTH	CHAPTER	CONTENT	ACTIVITIES	LEARNING OUTCOMES
March – April	■ Bridge Course	<ul style="list-style-type: none"> <li>■ Number System</li> <li>■ Coordinate Geometry</li> <li>■ Basics of Surface areas and Volumes</li> </ul>		■ Basics of the content will be revised
April – May	<ul style="list-style-type: none"> <li>■ CH – 1</li> <li>■ CH – 2</li> <li>■ CH – 15</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>(REAL NUMBERS)</b></li> <li>■ Introduction., ■ Euclid’s Division Lemma., ■ The Fundamental Theorem of Arithmetic., ■ Revisiting Irrational Numbers., ■ Revisiting Rational Numbers and Their Decimal Expansions</li> <li>■ <b>(POLYNOMIALS)</b></li> <li>■ Introduction., ■ Geometrical Meaning of the Zeroes and Coefficients of a Polynomial., ■ Division Algorithm for Polynomials</li> <li>■ <b>(PROBABILITY)</b></li> <li>■ Introduction., ■ Probability – A Theoretical Approach</li> </ul>	<ul style="list-style-type: none"> <li>■ To find the zeroes of a quadratic polynomial geometrically.</li> <li>■ To get familiar with the idea of probability of an event through a double colour card experiment.</li> </ul>	<ul style="list-style-type: none"> <li>■ Students will come to know the division of two number by using Euclid’s Division Lemma and composite numbers.</li> <li>■ Students will come to know the division of one polynomial by another polynomial and the relationship b/w the zeroes and coefficients.</li> <li>■ Students will come to know the sample space, event, trials</li> </ul>
May – June	<ul style="list-style-type: none"> <li>■ CH – 3</li> <li>■ CH – 4</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>(PAIR OF LINEAR EQUATIONS IN TWO VARIABLES)</b></li> <li>■ Introduction</li> <li>■ Pair of Linear Equations in Two Variables</li> <li>■ Graphical Method of Solution of a Pair of Linear Equations</li> <li>■ Algebraic Method of Solving a Pair of Linear Equations</li> </ul>		■ Students will come to know the methods of solving linear equations.

MONTH	CHAPTER	CONTENT	ACTIVITIES	LEARNING OUTCOMES
		<ul style="list-style-type: none"> <li>■ Substitution Method., ■ Elimination Method., ■ Cross – Multiplication Method./.</li> <li>■ Equation Reducible to a Pair of Linear Equations in Two Variables</li> <li>■ <b>(QUADRATIC EQUATIONS)</b></li> <li>■ Introduction., ■ Quadratic Equations</li> <li>■ Solution of a Quadratic Equation by Factorisation., ■ Solution of a Quadratic Equation by Completing the Squares</li> </ul>		
July	<ul style="list-style-type: none"> <li>■ CH – 5</li> <li>■ CH – 6</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>(ARITHMETIC PROGRESSIONS)</b></li> <li>■ Introduction., ■ Arithmetic Progressions., ■ nth Term of an AP</li> <li>■ Sum of The First n Terms of an AP</li> <li>■ <b>(TRIANGLES),</b> ■ Introduction</li> <li>■ Similar Figures., ■ Similarity of Triangles., ■ Criteria for Similarity of Triangles</li> <li>■ Areas of Similar Triangles</li> <li>■ Pythagoras Theorem</li> </ul>	<ul style="list-style-type: none"> <li>■ To verify that the given sentence in an arithmetic progression by cutting and pasting method.</li> <li>■ To find the width of a river by using the “BPT”</li> <li>■ To verify the “Pythagoras Theorem”</li> </ul>	<ul style="list-style-type: none"> <li>■ Students will come to know what is an AP and will come to know the nth term and sum of n terms of an AP.</li> <li>■ Students will come to know what are similar triangles and different theorems.</li> </ul>
August	<ul style="list-style-type: none"> <li>■ CH – 7</li> <li>■ CH – 8</li> <li>■ CH – 9</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>(CO-ORDINATE GEOMETRY)</b></li> <li>■ Introduction., ■ Distance Formula</li> <li>■ Section Formula., ■ Area of Triangles</li> <li>■ <b>(INTRODUCTION to TRIGONOMETRY)</b></li> <li>■ Introduction., ■ Trigonometric Ratios</li> <li>■ Trigonometric Ratios of Some Specific Angles., ■ Trigonometric Ratios of Complementary Angles., ■ Trigonometric</li> </ul>	<ul style="list-style-type: none"> <li>■ To verify experimentally a trigonometric identity (<math>\sin 2\theta + \cos 2\theta = 1</math>)</li> </ul>	<ul style="list-style-type: none"> <li>■ Students will come to know the distance formula, section formula and area of triangles.</li> <li>■ Students will come to know trigonometric ratios, identities and complementary angles.</li> <li>■ Students will come to know the application of trigonometry for finding the heights and distance.</li> </ul>



MONTH	CHAPTER	CONTENT	ACTIVITIES	LEARNING OUTCOMES
		Identities ■ (SOME APPLICATIONS of TRIGONOMETRY) ■ Introduction., ■ Heights and Distances		
September	■ CH – 10 ■ CH – 11 ■ CH – 12	■ (CIRCLES) ■ Introduction., ■ Tangent to a Circle ■ Number of Tangents from a Point on a circle ■ (Constructions) ■ Introduction., ■ Division of a Line Segment., ■ Construction of Tangents to a Circle ■ (AREAS RELATED TO CIRCLES) ■ Introduction., ■ Perimeter and Area of a Circle – A Review., ■ Areas of Sectors and Segments of a Circle., ■ Areas of Combinations of Plane Figures	■ To show that the length of tangents drawn from an external point to a circle are equal. ■ To verify that the sum of areas of three sectors of the same radii 'r' formed at the vertices of any triangle is $(\pi r^2)/2$ using paper cutting and pasting method.	■ Students will come to know about the tangents and its applications. ■ Students will come to know how to draw tangents from a point given outside the circle and similar triangles. ■ Students will come to know how to find out the area of sector, segment and the length of arc of a circle.
October	■ CH – 13	■ (SURFACE AREAS and VOLUMES) ■ Introduction ■ Surface Area of a Combination of Solids ■ Volume of a Combination of Solids ■ Conversion of Solid from One Shape to Another ■ Frustum of a Cone	■ To give a suggestive demonstration of the formula for the volume of right circular cylinder in terms of its height(h) and radius(r) of the base circle. ■ To make a cone of given slant height (l) and base of circumference.	■ Students will come to know how to find out the surface area and volumes of combined figures.

MONTH	CHAPTER	CONTENT	ACTIVITIES	LEARNING OUTCOMES
November	■ CH – 14	(STATISTICS) ■ Introduction ■ Mean of Grouped Data ■ Mode of Grouped Data ■ Median of Grouped Data ■ Graphical Representation of Cumulative Frequency Distribution	■ To find 'Median' of the given data graphically	■ Students will come to know how to find out the mean, mode and median of grouped data. ■ And how to draw ogive diagram.
		■ REVISION		
		■ PRE-BOARD I		
		■ PRE-BOARD II		
		■ REVISION		

### **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 X - NCERT Publication
- Kanishk Science Lab Manual - Science - Class X, NCERT Publication
- Exemplar Problems Class X - NCERT Publication



MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
<b>MARCH</b> (7) <b>Bridge</b> <b>Classes</b>	<ul style="list-style-type: none"> <li>■ Ch04: Structure of an atom</li> <li>■ Ch03 Atoms and molecules</li> <li>■ Ch14: Natural Resources</li> <li>■ Ch11: work ,power and energy</li> </ul>	<ul style="list-style-type: none"> <li>■ Atomic Models , Concept of subatomic particles</li> <li>■ Atoms , molecules, Dolton atomic Theory , Cations and anions , Chemical formulae</li> <li>■ Ozone layer, Ozone layer depletion</li> <li>■ Power and energy</li> </ul>	<ul style="list-style-type: none"> <li>■ To make a presentation on topic Ozone layer ,Consequences of Ozone depletion.</li> </ul>	<ul style="list-style-type: none"> <li>■ Students will be able to Identify chemical formulae and basic concept of Chemistry</li> <li>■ Analyze and discover the reason of ozone layer depletion and measures to avoid this – interpret the harmful effects of ozone depletion</li> <li>■ -to clear the concept of power , energy and their units</li> </ul>
<b>APRIL</b> (22)	<ul style="list-style-type: none"> <li>■ Ch01: Chemical Reaction and Equation</li> <li>■ Ch06: Life processes</li> <li>■ Ch12:Electricity (continue)</li> <li>■ Ch 13: Magnetic effects of current</li> </ul>	<ul style="list-style-type: none"> <li>■ Introduction</li> <li>■ Chemical equations</li> <li>■ Balanced Chemical equations.</li> <li>■ Types of chemical reactions</li> <li>■ Effects of oxidation reaction in daily life</li> <li>■ Understanding the chemical properties of acids and bases.</li> <li>■ 'Living Being' Basic concept of nutrition</li> <li>■ Heterotrophic nutrition Nutrition in human beings</li> <li>■ Digestive system</li> <li>■ Respiration</li> <li>■ (a) Breakdown of</li> </ul>	<ul style="list-style-type: none"> <li>■ Identify and note at least ten chemical reactions taking place in your home/ kitchen and give reasons for the same.</li> <li>■ Performing and observing the following reactions and classifying them into: <ul style="list-style-type: none"> <li>■ Combination reaction ,Decomposition reaction, Displacement reaction</li> <li>■ Double displacement reaction</li> </ul> </li> <li>(i) Action of water on quick lime</li> <li>(ii) Action of heat on ferrous sulphate crystals</li> <li>(iii) Iron nails kept in copper sulphate solution</li> </ul>	<ul style="list-style-type: none"> <li>■ Demonstrate &amp; verify chemical changes</li> <li>■ Relate chemical changes to a daily life situations – Convert chemical change into word equation</li> <li>■ Substitute it by symbols and formula</li> <li>■ Correlate law of conservation to balancing chemical equations</li> <li>■ Observe the changes to determine a chemical reaction</li> <li>■ Demonstrate types of chemical reactions</li> <li>■ Compare the different types of reactions</li> <li>■ Classify the reactions as</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		glucose ■ (b) Respiration in (i) Human (ii) Invertebrates , transport ■ Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. ■ Heating effect of electric current and its applications in daily life. Electric power, Inter relation between P, V, I and R ■ Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; ■ Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule, Direct current. Alternating	(iv) Reaction between sodium sulphate and barium chloride solutions. ■ To study digestive system with help of model. ■ To study respiratory system, circulatory system, with the help of model. ■ Experimentally show that carbon dioxide is given out during respiration ■ Make any project on closed and open circuit and observe the necessary equipment's required for it. ■ To measure current and voltage of the cell/battery used in this circuit. measure and write the same in your notebook. ■ Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I. ■ Use scientific conventions to represent symbols, units, equations, formula's and miniature diagram of all the devices and	oxidation or reduction ■ Compare the reaction ■ Apply oxidation in daily life ■ Develop the concept of life processes - arrive at the meaning of autotrophic nutrition ■ compare and contrast the steps of opening and closing of stomata ■ identify the type of heterotrophic nutrition in living organisms on the basis of their features ■ evolve the meaning & function of enzyme ■ arrange/sequentially all the steps of digestion of food in human ■ draw labelled diagram of human digestive system. ■ Unify the concept of glucose catabolism. ■ investigate about the gas released during exhalation ■ conduct investigation over electrical equipment's. ■ enhance knowledge about current and voltage used in domestic circuits.

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		current <ul style="list-style-type: none"> <li>Frequency of AC.</li> <li>Advantage of AC over DC.</li> <li>Domestic electric circuits.</li> </ul>	express them in the form of mind map /chart. <ul style="list-style-type: none"> <li>Determination of the equivalent resistance of two resistors when connected in series and parallel.</li> <li>To study magnetic lines of force with the help of bar magnet.</li> </ul>	<ul style="list-style-type: none"> <li>relate the concept of ohm's law.,</li> <li>compare and contrast different conductive materials and their resistivity .draw and identify the parts of respiratory system.,</li> <li>heating effect of current.,</li> <li>power and its importance in daily life.</li> <li>some relations between P,V,I and R.,</li> <li>concept of magnetic field and current.,</li> <li>Knowledge about solenoid.,</li> <li>can correlate the concept of electromagnetic induction in daily life.,</li> <li>will have an idea about AC &amp; DC source</li> <li>enhance knowledge about electric motor and generators</li> </ul>
MAY (22)	<ul style="list-style-type: none"> <li>Ch02: Acid, Base and Salt</li> <li>Ch06: Life processes (continue...</li> <li>Ch07: Control and co-ordination in animals and plants</li> <li>Ch 13: Magnetic effects of current(continue)</li> </ul>	<ul style="list-style-type: none"> <li>How do acids and bases react with metals</li> <li>How do metals carbonates and metal hydrogen carbonates react with acids</li> <li>How do acids and bases react with each other</li> <li>Reaction of metallic oxides with acids.</li> <li>Reaction of a non</li> </ul>	<ul style="list-style-type: none"> <li>Take various substances and classify their nature as acidic, basic and neutral using extracts of flowers such as China rose/ Periwinkle/Rose etc as indicators.</li> <li>To study the reaction between :            (i) metals and acids (ii) metals &amp; bases</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate the properties of acids and bases</li> <li>Identify the substances as acids or bases</li> <li>List the properties of acids and bases after performing the activities</li> <li>Compare the properties of acids and bases</li> <li>Correlate the pH to acidic,</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		metallic oxide with base. <ul style="list-style-type: none"> <li>What do all acids and all bases have in common</li> <li>How strong are acids and base solution</li> <li>Importance of pH in our daily life.</li> <li>More about salts.</li> <li>Excretion in plants and animals.</li> <li>Control and co-ordination in animals: Nervous system; Voluntary, involuntary and reflex action; Chemical co-ordination: animal hormones. Tropic movements in plants Introduction of plant hormones</li> <li>Force on current carrying conductor, Fleming's left hand rule.</li> </ul>	<ul style="list-style-type: none"> <li>To study the reaction between :            (i) metals carbonate and acid            (ii) metals hydrogen carbonate and acid</li> <li>To study the rxn between acids &amp; bases.</li> <li>Studying the properties of acids and bases (HCl&amp;NaOH) on the basis of their reaction with:            a) Litmus solution (Blue/Red)            b) Zinc metal c) Solid sodium carbonate</li> <li>To study excretory system with the help of model.</li> <li>To study human brain with the help of model.</li> <li>Assess different types of plant movements like touch response in Mimosa pudica</li> <li>To study Phototropism.</li> <li>To study the working of electric motor and generator with the help of model</li> </ul>	<ul style="list-style-type: none"> <li>basic or neutral substances.</li> <li>Test the pH values of solutions</li> <li>Classify the substances into acids &amp; bases by noting the color of pH paper</li> <li>Discuss the importance of pH in everyday life</li> <li>Substitute the names of salts by their formulae</li> <li>Identify the parent acid and base from which the salt is formed</li> <li>identify various waste products - understanding the importance of filtration and removal of liquid waste (urine) through kidney - draw the detailed structure of Nephron</li> <li>find out the waste products of plants &amp; mechanism of their removal</li> <li>discover the impact of less intake of water on excretory system</li> <li>evaluate the coordination and cooperation of different life processes for survival of</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
				<p>organisms</p> <ul style="list-style-type: none"> <li>■ To develop the meaning of stimulus and its corresponding response and sensory receptors</li> <li>■ draw and label the structure of a nerve cell - investigate and list impact of stimulus that creates reflex action</li> <li>■ develop the concept of Flemings left hand rule.</li> <li>■ discover the effect of magnetic field in different devices like motor , generator etc.</li> </ul>
<b>JULY(24)</b>	<ul style="list-style-type: none"> <li>■ Ch03: Metals and non metals</li> <li>■ Ch10 Light–Reflection and Refraction</li> <li>■ Ch08:Reproduction</li> </ul>	<ul style="list-style-type: none"> <li>■ Physical properties of metals and non metals</li> <li>■ Chemical properties of metals</li> <li>■ How do metals and non metals react?</li> <li>■ Basic Metallurgical processes;</li> <li>■ Reflection of light at curved surfaces, Images formed by spherical mirrors, center of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not</li> </ul>	<ul style="list-style-type: none"> <li>■ To study physical properties of metals and non metals.</li> <li>■ Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions: i) ZnSO<sub>4</sub> (aq) ii) FeSO<sub>4</sub> (aq) iii) CuSO<sub>4</sub> (aq) iv) Al<sub>2</sub> (SO<sub>4</sub>)<sub>3</sub> (aq)</li> <li>Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.</li> <li>■ Finding the pH of the following samples by using pH paper/ universal indicator: (i) Dilute Hydrochloric Acid</li> </ul>	<ul style="list-style-type: none"> <li>■ Compare properties of both metals and non-metals and Identify metals and non-metals from the given samples</li> <li>■ Tabulate the reactivity series of metals</li> <li>■ Predict the occurrence of various reactions</li> <li>■ Perform experiments on various reactions</li> <li>■ Correlate valency and type of bond formed</li> <li>■ Draw schematic diagrams for ionic compounds &amp; Demonstrate properties of</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		<p>required), and magnification.</p> <ul style="list-style-type: none"> <li>■ Refraction; laws of refraction, refractive index.</li> <li>■ Reproduction in animals and plants (asexual and sexual) reproductive health-need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women's health. .</li> </ul>	<ul style="list-style-type: none"> <li>(ii) Dilute NaOH solution (iii) Dilute Ethanoic Acid solution (iv) Lemon juice (v) Water (vi) Dilute Hydrogen Carbonate solution.</li> <li>■ Finding the image distance for varying object distances in case of a convex lens and drawing corresponding ray diagrams to show the nature of image formed.</li> <li>■ Determination of the focal length of: (i) Concave mirror (ii) Convex lens by obtaining the image of a distant object.</li> <li>■ To study (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.</li> <li>■ observe the bryophyllum leaves, sprouting seeds &amp; explore the parts of plant which propagate vegetatively</li> <li>■ draw and describe different types of asexual reproduction</li> <li>■ observe the different methods of vegetative propagation in our school garden.</li> <li>■ appreciate the creation of</li> </ul>	<p>ionic compounds</p> <ul style="list-style-type: none"> <li>■ Identify various steps in the extraction of metals</li> <li>■ Choose different separating techniques for the ores</li> <li>■ explain the significance of reflection and refraction in our life.</li> <li>■ enhances knowledge about refraction phenomenon taking place near us.</li> <li>■ explain the significance of variation in the survival of species</li> <li>■ conceptualize the various modes of reproduction used by unicellular organisms - observe the formation of two daughter cells from a single parent cell (through slide) - observe &amp; relate the small outgrowths developing from yeast cell with the mode of reproduction –</li> <li>■ develop the concept of sexual reproduction - correlate the labelled diagram to show the parts of a flower with the functions of each part.</li> <li>■ analyze and organize the</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
			nature by watching flowers blooming, seeds sprouting etc. <ul style="list-style-type: none"> <li>Interpret that the process of production must continuously go on.</li> </ul>	process of formation of diploid zygote by fertilization sequentially - draw labelled diagram of male and female reproductive system <ul style="list-style-type: none"> <li>identify the contraceptive measures and its need</li> <li>justify the need of reproduction for the perpetuation &amp; continuity of life,</li> </ul>
AUGUST(23)	<ul style="list-style-type: none"> <li>Ch03: Metals and non metals (Continue...)</li> <li>Ch 04: Carbon and its compound</li> <li>Ch10 Light–Reflection and Refraction(continue...)</li> <li>Ch09:Heredity and Evolution:</li> <li>Ch 15 : Our environment</li> </ul>	<ul style="list-style-type: none"> <li>Occurrence of metals</li> <li>Corrosion and its prevention</li> <li>Bonding in carbon</li> <li>Versatile nature of carbon</li> <li>Chemical properties of carbon compounds</li> <li>Some important carbon compounds- ethanol</li> <li>Soaps and detergents</li> <li>Refraction of light by spherical lens, Image formed by spherical lenses, Lens formula (Derivation not required), Magnification. Power of a lens.</li> <li>Heredity; Mendel's</li> </ul>	<ul style="list-style-type: none"> <li>To study different types of ores.</li> <li>Study of the following properties of acetic acid (ethanoic acid): i) odour ii) solubility in water iii) effect on litmus iv) reaction with Sodium Hydrogen Carbonate.</li> <li>Study of the comparative cleaning capacity of a sample of soap in soft and hard water.</li> <li>To study hardness of the water.</li> <li>Demonstrate activities for the preparation of soap and for identifying the salts which cause hardness in water</li> <li>Tracing the path of a ray of</li> </ul>	<ul style="list-style-type: none"> <li>Identify the factors responsible for corrosion</li> <li>Relate the metal to the coating formed</li> <li>Propose various methods to prevent corrosion</li> <li>Illustrate carbon with 4 valence electrons forming only covalent bonds</li> <li>Correlate the bonds formed as single, double or triple to the number of pairs of electrons shared between them</li> <li>Classify the homologous series and its characters</li> <li>Select the compound and identify the functional group</li> <li>Discover the effect of soap</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		contribution- Laws for inheritance of traits Sex determination: brief introduction; Basic concepts of evolution. <ul style="list-style-type: none"> <li>Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.</li> </ul>	light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result <ul style="list-style-type: none"> <li>To study inheritance of traits with the help of charts</li> </ul>	on cleaning <ul style="list-style-type: none"> <li>Draw the structure of micelle</li> <li>Compare hard and soft water</li> <li>Realize the excessive use of soaps and detergents leads to water pollution</li> <li>Discover the effect of image formed by lens.</li> <li>Draw the structure of refraction through glass slab.</li> <li>Compare different lens used in spectacles.</li> <li>identify common traits in humans &amp; classify them in different categories</li> <li>appreciate the efforts of Mendel for studying contrasting traits located on different chromosomes in pea plant</li> <li>construct a monohybrid &amp; dihybrid cross and calculate the ratio of offsprings (Punnett square)</li> <li>co-relate the link between genes present and the traits expressed – analyze the importance of knowledge of gender/sex determination in present situation in India – construct</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
				<p>a cross to show possibility of male or female child being born in</p> <ul style="list-style-type: none"> <li>■ compare evolution due to natural selection and genetic drift</li> <li>■ To develop the definition of ecosystem &amp; classify ecosystem in to various types on the basis of their nature and size also correlate the importance of biotic and abiotic components in all ecosystem</li> <li>■ construct the food chain with different trophic levels also calculate the amount of energy transferred among various trophic levels</li> <li>■ construct food web formed by interlinking of food chain</li> <li>■ Sensitize for planting of more trees which provides huge amount of oxygen in the atmosphere</li> </ul>
SEPTEMBER (23)	■ Revision – Periodic test-2			

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
OCTOBER (21)	<ul style="list-style-type: none"> <li>■ Ch : 05 Periodic classification of elements</li> <li>■ Ch 11: Human eye</li> <li>■ Ch16: Management of natural resources</li> <li>■ Ch 14: Sources of energy</li> </ul>	<ul style="list-style-type: none"> <li>■ Making order out of chaos</li> <li>■ Newland law of octave</li> <li>■ Mendeleev 's periodic table</li> <li>■ Modern periodic table</li> <li>■ Trends in modern periodic table</li> <li>■ Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses.</li> <li>■ Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.</li> <li>■ Conservation and judicious use of natural resources. Forest and wild life; Coal and Petroleum conservation. Examples of people's participation for conservation of natural resources. Big dams: advantages and limitations; alternatives, if any. Water harvesting. Sustainability</li> </ul>	<ul style="list-style-type: none"> <li>■ To study the variation of properties along the period and group with the help of modern periodic table.</li> <li>■ Tracing the path of the rays of light through a glass prism.</li> <li>■ Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).</li> <li>■ To study sources of energy with the help of audio visual aids.</li> </ul>	<ul style="list-style-type: none"> <li>■ Classify elements according to their properties</li> <li>■ Discover salient features of each classification &amp; Understand the changes in classification over time</li> <li>■ Find out the achievements and limitations of each classification</li> <li>■ Appreciate the periodic trends in the properties of elements</li> <li>■ Associate the electronic configuration of a particular element to its atomic number</li> <li>■ Calculate the number of valence electrons and the valency of an element</li> <li>■ classify eye defects and understand the difference in defects of vision and their corrections.</li> <li>■ conceptualize the concept of refraction through prism, some knowledge about dispersion and its applications in daily life.</li> <li>■ explore the need of management of natural resources</li> <li>■ Critically analyze the</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
		of natural resources. ■ Big dams: advantages and limitations; alternatives, if any. Water harvesting. Sustainability of natural resources. ■ Different forms of energy, ■ conventional and non-conventional sources of energy: ■ fossil fuels, solar energy; biogas; wind, water and tidal energy; nuclear energy. ■ Renewable versus non-renewable sources.		importance of forests & the need of conservation ■ Understand the importance of water as a universal solvent & as an elixir of life ■ discover the uses of coal & petroleum as natural resources ■ interpret the significance of natural resources management ■ interpret the significance of energy and its types. ■ differentiate between conventional, non-conventional, renewable and nonrenewable sources of energy.
NOVEMBER(18)	■ Revision – PT3			
DECEMBER(22)	■ Revision - Annual Examination			
JANUARY(18)	■ Revision - Annual Examination			
FEBRUARY(4)	■ Revision - Annual Examination			
MARCH	■ Annual Examination			

**SUGGESTIONS TO THE PARENTS:**

- Good timetable will make the preparations easy for boards.
- Sufficient time should be devoted to self-study.
- Practicing previous year question papers prepare students for the coming challenge.

**WEIGHTAGE: COURSE STRUCTURE OF CLASS X**

(Annual Examination)

UNIT	NAME	MARKS
I	Chemical Substances - Nature & Behavior	25
II	World of Living	23
III	Natural Phenomenon	12
IV	Effects of Current	13
V	Natural Resources	07
	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	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
<b>MARCH</b> [7]	■ RESOURCES AND DEVELOPMENT[G-1]	<ul style="list-style-type: none"> <li>■ Types of resources</li> <li>■ Classification of resources</li> <li>■ Land and soil resources</li> <li>■ Resource conservation</li> </ul>	■ Map showing various type of soil deposition at different parts of India	■ The Students will learn about the resources, its meaning and how to conserve them and different types of soil and its importance and their location in India.
	■ POWER SHARING [C-1]	■ Story of Belgium and Sri Lanka., ■ Meaning and forms of Power sharing	■ Group Discussion on importance of Power sharing	■ Meaning of power sharing and how power sharing leads in avoiding the social conflicts and leads to peace.
<b>APRIL</b> [22]	<ul style="list-style-type: none"> <li>■ NATIONALISM IN INDIA [H-3]</li> <li>■ FEDERALISM [C-2]</li> </ul>	<ul style="list-style-type: none"> <li>■ India after World war –II</li> <li>■ Khilafat movement and non –Cooperation movement., ■ Dandi march and Civil disobedience movement., ■ Developing nationalism., ■ Key features and its practice in India</li> <li>■ Decentralization in India</li> <li>■ Panchayati Raj system</li> </ul>	■ Showing videos of different freedom movements of India., ■ Class activity showing different types of federations and its role.	<ul style="list-style-type: none"> <li>■ Meaning of nationalism and how it started and how it motivate the mass to fought against the britishers., ■ Students would be able to understand that who participated and how they contribute in thefreedom struggle.</li> <li>■ Meaning of federalism and how it leads to the formation of India.</li> </ul>
	■ DEVELOPMENT [E-1]	■ Different development goals., ■ National Development., ■ Comparing different countries	■ Activities mentioned in the chapter	■ Meaning of developments and different indicators of development.
	■ FOREST AND WILDLIFE [This chapter is to be assessed only in the Periodic Tests][G-2]	<ul style="list-style-type: none"> <li>■ Bio diversity in India</li> <li>■ Vanishing forests., ■ Conservation of forest and wildlife., ■ Community and Conservation</li> </ul>	■ Map activity	■ Importance of forest in the life of human beings and how wildlife leads to balancing of eco-system.

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
<b>MAY</b> [22]	■ THE AGE OF INDUSTRIALISATION [H-5]	<ul style="list-style-type: none"> <li>■ Proto-industrialization</li> <li>■ Industrialization in Europe</li> <li>■ Industrialization in India</li> <li>■ Life of workers</li> </ul>	■ Videos of early industrialization process will be shown	<ul style="list-style-type: none"> <li>■ Meaning of industry and how industrialization</li> <li>■ started and consequences of industrialization.</li> </ul>
	■ WATER RESOURCES [G-3] [This chapter is to be assessed only in the Periodic Tests]	<ul style="list-style-type: none"> <li>■ Multipurpose projects</li> <li>■ Rain water harvesting</li> <li>■ Bamboo drip irrigation</li> </ul>	■ Video showing water pollution and effects of water scarcity	■ Importance of water in everyday life and availability of fresh water and the scarcity of water and measures to conserve water.
	■ AGRICULTURE [G-4]	<ul style="list-style-type: none"> <li>■ Types of farming., ■ Major crops in India., ■ Economic contribution., ■ Impact of globalization on agriculture</li> </ul>	■ Flow chart showing different crops and geographical conditions required for their growth.	■ Students learn about the meaning of agriculture and various types and its contribution in the economic developments.
	■ DEMOCRACY AND DIVERSITY[C-3] [This chapter is to be assessed only in the Periodic Tests]	<ul style="list-style-type: none"> <li>■ Mexico Olympics</li> <li>■ Democratic standards in other countries</li> <li>■ Democratic standards in India</li> </ul>		■ Meaning of democracy and how democracy adjusted the diversity.
<b>JUNE</b> [05]	PT -1		■ Prepare a project as per HHW	
<b>JULY</b> [24]	■ GENDER ,RELIGION AND CASTE [C-4]	<ul style="list-style-type: none"> <li>■ Gender discrimination and ways to overcome</li> <li>■ Communalism-meaning and effect., ■ Caste in politics and Politics in caste</li> </ul>	■ Video showing discrimination in the society on the basis of religion and caste	<ul style="list-style-type: none"> <li>■ Meaning of gender religion and caste and how these indicators are used in everyday life and in Indian politics and formation of policies in India on the basis of above indicators.</li> </ul>



MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	<ul style="list-style-type: none"> <li>THE RISE OF NATIONALISM IN EUROPE [H-1]</li> </ul>	<ul style="list-style-type: none"> <li>The French revolution and idea of the nation.,</li> <li>The making of Nationalism in Europe.,</li> <li>The making of Germany and Italy.,</li> <li>Nationalism and Imperialism</li> </ul>		<ul style="list-style-type: none"> <li>Meaning of nationalism and how it started and importance of French Revolution in the rise of nationalism in Europe. Students would be able to understand the unification of Germany, Italy and Great Britain.</li> </ul>
	<ul style="list-style-type: none"> <li>POPULAR STRUGGLES AND MOVEMENTS [C-5] [This chapter is to be assessed only in the Periodic Tests]</li> </ul>	<ul style="list-style-type: none"> <li>Popular struggle in Nepal and Bolivia.,</li> <li>Mobilization and Organization.,</li> <li>Pressure groups and Movements</li> </ul>		
AUGUST [23]	<ul style="list-style-type: none"> <li>MINERALS AND ENERGY RESOURCES [G-5]</li> </ul>	<ul style="list-style-type: none"> <li>Classification of minerals</li> <li>Conservations of minerals</li> <li>Conventional and Non-conventional sources of energy</li> <li>Conservation of energy resources</li> </ul>	<ul style="list-style-type: none"> <li>Flow chart showing different minerals, their uses and where they are found.,</li> <li>Video showing Non-conventional sources of energy</li> </ul>	<ul style="list-style-type: none"> <li>Meaning of minerals and different types of power resources and over use of these resources and students would be able to understand the meaning of sustainable developments.</li> </ul>
	<ul style="list-style-type: none"> <li>SECTORS OF THE INDIAN ECONOMY [E-2]</li> </ul>	<ul style="list-style-type: none"> <li>Primary, secondary and tertiary sectors.,</li> <li>Comparing different sectors.,</li> <li>Organized and unorganized sectors</li> </ul>	<ul style="list-style-type: none"> <li>Group discussion</li> </ul>	<ul style="list-style-type: none"> <li>Importance of all the sectors of economy and how they lead to economic developments.</li> </ul>
	<ul style="list-style-type: none"> <li>MONEY AND CREDIT [E-3]</li> </ul>	<ul style="list-style-type: none"> <li>Sources of credit</li> <li>Credit activity of Banks</li> <li>Role of RBI</li> </ul>	<ul style="list-style-type: none"> <li>Showing different ways of credit formation by banks and different modes of money</li> </ul>	<ul style="list-style-type: none"> <li>Meaning of money and its importance and uses of money</li> <li>And money in the market is created.</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES	
	<ul style="list-style-type: none"> <li>MANUFACTURING INDUSTRIES [G-6]</li> </ul>	<ul style="list-style-type: none"> <li>Classification of Industries</li> <li>Agro based and mineral based industries.,</li> <li>IT as industry.,</li> <li>Changing nature of international trade</li> </ul>	<ul style="list-style-type: none"> <li>Activity using different coloured cards which will be allotted to different industries put up in the discussion on the basis of their importance in our daily life, contribution in the economy and pollution caused by them.</li> </ul>	<ul style="list-style-type: none"> <li>Importance of secondary sectors in India and different types of industries and how it leads to economic developments.</li> </ul>	
SEPTEMBER [23]	PT-2	<ul style="list-style-type: none"> <li>PRINT CULTURE AND THE MODERN WORLD [H-7]</li> </ul>	<ul style="list-style-type: none"> <li>Print in China, Japan and Korea.,</li> <li>Print comes to Europe.,</li> <li>Religious debates and print.,</li> <li>French revolution and print revolution.,</li> <li>Print in India</li> </ul>	<ul style="list-style-type: none"> <li>Showing video of early type of printing technology and its spread to Europe</li> </ul>	<ul style="list-style-type: none"> <li>How printing started in the world and changes brought by printing in today's world.</li> </ul>
		<ul style="list-style-type: none"> <li>GLOBALIZATION AND THE INDIAN ECONOMY [E-4]</li> </ul>	<ul style="list-style-type: none"> <li>Meaning of globalization and its process.,</li> <li>Role of MNC.,</li> <li>Fair globalization and its constraints</li> </ul>	<ul style="list-style-type: none"> <li>Preparing a collage on the working of MNC</li> </ul>	<ul style="list-style-type: none"> <li>Meaning of globalization, mnc, and how it leads to economic development and how it provides the stage for competition</li> </ul>
OCTOBER [21]		<ul style="list-style-type: none"> <li>LIFELINES OF NATIONAL ECONOMY [G-7]</li> </ul>	<ul style="list-style-type: none"> <li>Various means of transport</li> <li>Development in communication and its role.,</li> <li>Tourism as trade.,</li> <li>Recent advancements on international trade</li> </ul>	<ul style="list-style-type: none"> <li>Preparing a flow chart on the various means of transportation and their role in National economy</li> </ul>	<ul style="list-style-type: none"> <li>Different types of means of transportation and their uses in everyday life.,</li> <li>Role in the economic developments.</li> </ul>
		<ul style="list-style-type: none"> <li>POLITICAL PARTIES [C-6]</li> </ul>	<ul style="list-style-type: none"> <li>Need of political parties</li> <li>National parties</li> <li>Challenges with political parties and ways to overcome it</li> </ul>		<ul style="list-style-type: none"> <li>What are political parties and how they formed ?,</li> <li>Meaning of national and state parties and how they are recognized as political parties.</li> </ul>

MONTH	CHAPTER/TOPIC	SUB TOPIC	SUGGESTED ACTIVITIES	LEARNING OUTCOMES
	<ul style="list-style-type: none"> <li>■ OUTCOMES OF DEMOCRACY [C-7]</li> </ul>	<ul style="list-style-type: none"> <li>■ Desired outcomes</li> <li>■ Economic and social outcomes</li> <li>■ Political outcomes</li> </ul>	<ul style="list-style-type: none"> <li>■ Create a poster on features of a good democracy</li> </ul>	<ul style="list-style-type: none"> <li>■ Students learn about the meaning of democracy and different types of outcomes such as political outcomes ,social outcomes.</li> </ul>
	<ul style="list-style-type: none"> <li>■ CHALLENGES TO DEMOCRACY [C-8] [This chapter is to be assessed only in the Periodic Tests]</li> </ul>	<ul style="list-style-type: none"> <li>■ Types of challenges</li> <li>■ Redefining democracy</li> </ul>		<ul style="list-style-type: none"> <li>■ What are the challenges in the establishment of the democracy?</li> </ul>
NOVEMBER [18]	<ul style="list-style-type: none"> <li>■ Revision for Pre-Boards</li> </ul>			
DECEMBER [22]	<ul style="list-style-type: none"> <li>■ PRE-BOARD-I</li> </ul>			
JANUARY [18]	<ul style="list-style-type: none"> <li>■ PRE-BOARD-II</li> </ul>			

**SUGGESTIONS TO THE PARENTS:**

- Every Monday is decided as the day of Social Science class test.
- Send test copies on the day of test (Monday) and check your wards marks on regular basis and sign the test copies.
- 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.
- Make sure the child studies the same part of chapter at home that is done in the class on regular basis.
- Every day at least 5 questions which are done in the class must be written in the notebook and learnt

**WEIGHTAGE:**

WEIGHTAGE	FINALS	FINALS MARKS WEIGHTAGE
TOTAL NO. OF CHAPTERS/MARKS	18	80
HISTORY	04	20
GEOGRAPHY	05	20
CIVICS	05	20
ECONOMICS	04	20

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



**SWARNPRASTHA PUBLIC SCHOOL**

Sec-19 near Omaxe city, Sonapat, **Contact us:** Toll free- 1800-1800-842, **Or e-mail:** [info@swarnprastha.com](mailto:info@swarnprastha.com)