

Month

April –May

Topic

Literature Reader

(a) How I taught my Grand Mother to read (Prose)

(b) The Brook (poem)

Main Course Book :People

Work Book :Verb Forms

Objective

Enable students to realise the anguish of Illiterate adults and importance of literacy

To help students to know that no matter how long we live we should try to make our lives fruitful and significant

Write in appropriate style and format

ACTIVITY

Share one of the most memorable moments you spent with your grandparents.

Make a poster on Each One Teach One Campaign.

The poem ' Brook' is full of images. Find these things around you and try to draw them on a sheet os A4 size. Description (People / Place / Objects / Events)

Month

July

Topic

Literature Reader

(a) A Dog named Duke (Prose)

(b) The Road Not Taken (Poem)

(c) The Solitary Reaper (Poem)

Main Course Book

(a) Adventure

Work Book

(a) Future Time reference

(b) Reported Speech

Objective

To develop love and kindness toward animals

To make students realise that the career they choose should benefit not only their own self but the entire society

Creating interest and arousing love for poetry

Presenting the final product in an appropriate style.

ACTIVITY

Collect more information about Robert Frost.

Compose a short poem on ' Nature'.

Narrate a situation where you got into trouble for not listening to your parent's advise and how your parents helped you in rectifying your mistake

Month

August

Topic**Literature Reader**

- (a) Villa for sale (drama)
- (b) Lord Ullin's Daughter (Poem)

Main Course Book

- (a) Environment
- (b) The Class IX Radio and Video show

Work Book

- (a) Modals

Objective

Make students realise that opportunist can never gain in the long run
To sensitise students to empathise with others
To make students aware of the need to plant trees

ACTIVITY

Suppose your father is going to buy a house. He has asked you what you want in your house . List 10 features

Group discussion on the topic - ' Lord Ullin's Daughter was right in her decision to defy her father'
Write a paragraph on (a) importance of cleanliness (b) preservation of environment.

Month**September**

Revision & First Term Examination

Month**October****Topic****Literature Reader**

- (a) The Man Who Knew Too Much (Prose)
- (b) The Seven Ages (Poem)

Main Course Book

- (a) Mystery

Work Book

- (a) Determiners

Objective

Sensitise students to be modest and unassuming
To enable students to empathise with others
To sharpen thinking and analytical skill

ACTIVITY

Find out the ranks in the Defence Forces of India
'Dumb Charade' based on The Seven Ages
Playing a mystery solving game

Month**November****Topic****Literature Reader**

- (a) Keeping It From Harold
- (b)Oh! I wish I looked after Me Teeth (Poem)

Main Course Book

- (a) Children

Work Book

Connectors

Objective

Sensitise students towards Social Responsibilities
Create awareness about dental health
To develop insight into sensitive issues of child labour
Help in developing connectivity of thought process

ACTIVITY

Collect information about your favourite boxer and share it with the class.
Write 4-5 slogans to develop awareness about dental hygiene.
Debate : Education of a girl child is a burden

Month

December

Topic

Literature Reader

- (a) Best Seller (Prose)
- (b) Song Of The Rain(Poem)

Main Course Book

- (a) Sports and Game

Work Book

- (a) Preposition

Objective

To enable students to know what is a best seller
Sensitise students about the importance of rain for our survival
To sensitise students about the need to remain fit and develop sportsman spirit

ACTIVITY

Dialogue Writing - Two friends meeting after a long time
Discuss with your friend the origin , falling of rain and its function on the earth . Write a paragraph on water cycle
Speech - How politics in sports has marred healthy competition in different games

Month

January

Topic

Literature Reader

- (a) The Bishop's Candlesticks (Play)

Work Book

Passive

Objective

Understanding and appreciation of drama
Enable students to write reports

ACTIVITY

Enact the play ' The Bishop's Candlesticks' in class.
The park in your locality is in a mess . Write a report on it in 50 -60 words

Month

February

Writing Skills to be covered in both the terms

Notice ,Message ,Diary Entry ,Bio graphical Sketch ,Data Inperpretation ,Dialogue Writing ,Description (Objects & events) ,Formal/Informal letter,E Mail , Article , Speech , Debate , News Paper /School Magazine report , Story

Long Reading text (Novel)

Three Men In A Boat(By Jerome K. Jerome)

Objective - To develop interest in reading, enhance vocabulary and make them more wise witty and prudent.

HINDI

महीना

अप्रैल

पुस्तक का नाम

स्पर्ष

धूल, रैदास

व्याकरण

वर्ण विचार, पत्र-लेखन, चित्र वर्णन

उद्देश्य/जीवन

ग्रामीण संस्कृति की महिमा से अवगत कराना आध्यात्मिकता का विकास कराना।

रचनात्मक गतिविधि

मिट्टी और धूल पर आधारित कविताओंका संकलन

महीना

मई

पुस्तक का नाम

स्पर्ष

दुख का अधिकार, दोहे

संचयन

गिल्लू

व्याकरण, सवाद

षड्विचार सूचना अपठित बोध

उद्देश्य/जीवन

समाजिक विशमता के माध्यम से लोगो की मानसिकता से परिचित करवाना। जीवन मूल्यों में प्रेरणा।
वन्य संरक्षण के प्रति जागरूकता।

रचनात्मक गतिविधि

सस्वर दोहा वाचन। मेरा प्रिय पशु कक्षा-चर्चा।

महीना

जुलाई

पुस्तक का नाम

स्पर्ष

एवरेस्ट मेरी शिखर यात्रा, रहीम के दोहे

संचयन

कल्लु कुम्हार की उनाकोटी

व्याकरण

उपसर्ग - प्रत्यय, संवाद विराम चिन्ह

उद्देश्य/जीवन मूल्य

बचेन्द्रीपाल एक प्रेरणा स्रोत। जीवन मूल्यों से प्रेरणा।

रचनात्मक गतिविधि

अपनी रोमांचकारी यात्रा का वर्णन सुनाना

महीना

अगस्त

पुस्तक का नाम

स्पर्ष

आदमीनामा

संचयन

स्मृति

व्याकरण

विज्ञापन, चित्रवर्णन, सन्धि

उद्देश्य/जीवन मूल्य

बाल मनोविज्ञानिकता का चित्रण। मानव की विभिन्न भूमिका।

रचनात्मक गतिविधि

विज्ञापन एकत्रित करें एवं बनायें। बचपन की घटनाओं का संकलन

महीना

सितम्बर

पुस्तक का नाम

स्पर्ष

अतिथि जाओगे मेरे अतिथि पर मेरा अनुभव

पुनरावृत्ति एव अर्धवार्षिक परीक्षा

पाठ - 1, 2, 3 (गद्य)

पाठ - 1, 2, 3 (पद्य)

संचयन

पाठ - 1, 2, 3

व्याकरण

वर्ण विचार, पत्र, षड्विचार, सूचना, अपठित, बोध, उपसर्ग - प्रत्यय, संवाद, सूचना, विज्ञापन,
चित्रवर्णन, सन्धि, अनुच्छेद लेखन

महीना

अक्टूबर

पुस्तक का नाम

स्पर्ष

अतिथि तुम कब जाओगे। एक फूल की चाह

संचयन

मेरा निजी पुस्तकालय

व्याकरण

सन्धि चित्र वर्णन

उद्देश्य/जीवन मूल्य

उद्देश्य/जीवन मूल्य

समाज में छुआछूत जैसी कुरीति से अवगत कराया। पुस्तक प्रेम से जागृत करवाना।

रचनात्मक गतिविधि

मेरी प्रिय पुस्तक पर टिप्पणी।

महीना

नवम्बर

पुस्तक का नाम

स्पर्ष

वैज्ञानिक चैतना के वाहक चद्रषेखर वैकंट रामन्। अग्नि पथ

संचयन

हामिद खाँ

व्याकरण

अनुच्छेद-लेखन

उद्देश्य/जीवन मूल्य

विज्ञान के प्रति रुचि एवं जागरूकता। जीवन में साहस, धैर्य की प्रेरणा।

रचनात्मक गतिविधि

विज्ञान अभिषाप है या वरदान। वाद-विवाद।

महीना

दिसम्बर

पुस्तक का नाम

स्पर्ष

कीचड़ का काव्य। गीत - अगीत।

व्याकरण

विराम - चिन्ह

उद्देश्य/जीवन मूल्य

भौगोलिक ज्ञान/भाव एवं अभिव्यक्ति में अन्तर।

रचनात्मक गतिविधि

‘ ‘क्या कीचड़ गन्दगी है?’ ’ भाषण प्रतियोगिता

महीना

जनवरी

पुस्तक का नाम

स्पर्ष

धर्म की आड

संचयन

॰

दिये जल उठे

व्याकरण

संवाद - लेखन

उद्देश्य/जीवन मूल्य

धर्म का जीवन में महत्त्व।

रचनात्मक गतिविधि

विभिन्न धर्मों के प्रतीक चिन्हों पर कोलॉज

महीना

फरवरी

पुस्तक का नाम व्याकरण.....विज्ञापन

नये इलाके में खूब रचते हैं। हाथ। षुक्रतारे के समान

उद्देश्य/जीवन मूल्य

बाल मजदूरी एक सामाजिक अभिषाप।

रचनात्मक गतिविधि

गाँधी जी की आत्मकथा 'सत्य के प्रयोग' प्रेरक अंश सुनाये। बाल मजदूरी एवं मीडिया की भूमिका (आषु भाषण) किसी मलिन बस्ती में जाकर जानकारी एकत्रित करें।

महीना

मार्च

पुस्तक का नाम

पुनरावृत्ति एवं अर्धवार्षिक परिक्षा

स्पर्ष

पा0 - 4, 5, 6, 1

पा0 - 4, 5, 6, 1

संचयन

पा० - 4, 5, 6।

व्याकरण

सन्धि, अनुच्छेद, वाक्य, विचार, संवाद, लेखन, विराम-चिन्ह, अपठित बोध, वर्ण-विच्छेद, पत्र-लेखन, उपसर्ग-प्रत्येय, विज्ञापन, चित्र-वर्णन।

MONTHWISE SYLLABUS FOR CLASS IX - 2016-17
MATHEMATICS

MONTH

APRIL

TOPIC

1.Number System

2.Polynomials

LEARNING OBJECTIVE

- To gain the knowledge of various types of numbers e.g. natural numbers, whole numbers, rational numbers & irrational numbers.
- To develop analytical skills.
- To develop data handling and writing skills
- To develop equal distribution skills
- To identify polynomials
- To find coefficient, degree, no. of terms
- To find value of polynomials at a point
- To develop expression and creativity
- To develop the knowledge of formulae
- To develop social uniformity, honesty and behavioural value

ACTIVITY

- *Prepare a list of five mathematicians whose work on number theory is well known.
- * To verify the algebraic identity $(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$ using paper cutting and pasting.

MONTH

MAY
TOPIC

3.Co-ordinate Geometry

4.Introduction to Euclid's Geometry

LEARNING OBJECTIVE

- To explore the location of an object with frame of reference
- To practice the skills of locating a point in four quadrants, on the x-axis and y-axis
- To develop creativity, constructive power, writing and drawing from traffic rules
- To recognise point, surface and edges of surface
- To learn about various terms like axioms, postulates, theorems.
- To develop analysing, drawing, writing, division and presentation
- To develop social uniformity

ACTIVITY

- * Plot the points

A(-2,0),B(-1,1),C(0,2),D(2,1.5),E(4,1),F(6,0.5),G(8,2),H(7.5,0),I(8,-2),J(6,-0.5),K(4,-1),L(2,-1.5), M(0,-2),N(-1,-1) on the graph paper and identify the animal formed.

- * Prepare a brochure based on Euclid's axioms and postulates and also their applications .

MONTH
JULY
TOPIC

5.Lines and Angles

LEARNING OBJECTIVE

To recall and review basic geometrical terms, lines, angles line segments, point, plane, collinear and non collinear points, complementary, adjacent, supplementary, vertically opposite and linear pair

To develop analysing , problem solving, correlation to real life and comprehension

ACTIVITY

In a Metro, there are seats and backrest. When we sit, we feel comfortable. Measure the angle between the seat and the backrest. Repeat the same with chairs and sofa at home and observe the relation between the angles.

MONTH
AUGUST
TOPIC

6.Triangles

7.Heron's formula

LEARNING OBJECTIVE

- To learn about congruent triangles
- To understand different criteria for congruence of triangles viz SSS, SAS, RHS, AAS and ASA
- To understand inequalities in a triangle
- To develop analysing , problem solving, use of IT, correlation to real life, creativity, comprehension and equality
- To find the area of triangle when the sides of triangle are given
- To find the area of quadrilateral by dividing them into two triangles
- To develop the skill of finding areas
- To develop presentation, writing, drawing diagrams and calculations etc. and cultural value among the students

SA I TERM

ACTIVITY

- * Prepare the coverage of the assignment on theorems using patterns based on congruent triangles.
- * Prepare a rakhee using triangles also find areas of all these triangles.

MONTH

OCTOBER

TOPIC

8.Linear Equations In Two Variables

9.Quadilateral

LEARNING OBJECTIVE

- Recall of linear equation in one variable
- To identify coefficients and constant of linear equations in two variables
- To develop expression, creativity, data presentation, writing, drawing and sketching
- To recall and review the knowledge of various types of quadrilaterals
- To understand the properties of all types of quadrilaterals with reference to its sides and angles
- To develop problem solving, use of IT, correlation to real life and data handling

ACTIVITY

- *The taxi fares in a city are as follows: Rs. 15 for first Km. and Rs. 8 for every subsequent Km. Taking the total distance covered as X and total fare as Y , write the above as a linear equation. Prepare a ppt on this problem.
- * Visit a historical place. Count and note the number of quadrilaterals, rectangles, squares, parallelogram and rhombus shaped stones in the building.

MONTH

NOVEMBER

TOPIC

10. Area of Parallelograms and Triangles

11. Statistics

LEARNING OBJECTIVE

- To recall formulae of area of all types of quadrilaterals
- To identify the figures on the same base and between the same parallels
- To understand that area of same base and between the same parallels are equal
- To develop analysing, problem solving and thinking
- To develop drawing, imagination, presentation and creativity
- To recall the meaning of the term statistics and need of correlation of data, survey and statistical analysis
- To develop the skill of representing data graphically as bar graph histogram of uniform width histogram of varying width, frequency polygon
- To learn about measure of central tendency i.e. mean, mode and median for raw data and to apply the knowledge in solving problems
- To develop the skill of analyzing , correlation to real life, data handling and expression.

ACTIVITY

*A farmer has two pieces of land in a parallelogram shape on the same base. He grows vegetables and flowers in two triangular pieces of land .Check whether the two triangular pieces of land are equal in areas.

*Integrated Project for the Second Term.

MONTH

DECEMBER

TOPIC

12. Probability

13. Circle

14. Construction

LEARNING OBJECTIVE

- To understand the commonly used word 'probability' in mathematical sense.
- To be able to explain the key terms like random experiment sample, space, events, outcomes, favourable and unfavourable outcomes.
- To calculate probability using formula

- To differentiate between empirical and mathematical probability
- To appreciate that probability of an event lies between 0 and 1
- To develop creativity, data collection and handling

Definition and basic terms related to circle viz. interior, exterior, circular region, radius, diameter, arc, minor arc, major arc, segment, minor segment, major segment

- To apply knowledge gained on the topic circles to solve question
- To develop the skill of problem solving and use of IT
- To acquire the knowledge of basic requisites to construct a triangle
- To develop the skill of constructing a triangle with given condition
- To develop care towards poor and save lives

ACTIVITY

*To evaluate the probability of number of students who took part on the occasion of Independence Day Celebration in the school.

*'Angle in the same segment of a circle are equal '

Using the above result make a geometrical design with the help of needle and thread.

*Lions Club of our city wants to make a tent of triangular shape of sides 11m, 15m and 21m to save poor people from cold during winter season.

Construct a triangle taking measurements of sides in proportion

MONTH

JANUARY

TOPIC

15.Surface areas and Volumes

LEARNING OBJECTIVE

- To be able to find out the total surface area of cube, cuboid, cylinder, cone, sphere
- To be able to find out the volume of cube, cuboid, cylinder, cone, sphere
- To develop the skill of problem solving, correlation to real life, creativity and writing

SA 2 TERM

ACTIVITY

- * Calculate the volume and surface area of any cardboard box in your house. Also paste a photograph of the box.
- * Quiz from the chapter.

SUBJECT : SOCIAL SCIENCE

MONTH	CHAPTER	LEARNING OBJECTIVES	ACTIVITIES/ ASSIGNMENTS
SA I APRIL/MAY	L1(Geography) India- Size and Location. L1 (History) The French Revolution L1 (Pol. Science) Democracy in the Contemporary world.	<ul style="list-style-type: none"> To understand global position and size and location of India To make them aware about how India contributed to the World Development and vice-versa Familiarize students with the names of people involved, the different types of ideas that inspired the revolution. Developing sophisticated defense of democracy against common prejudices. Compare democracy with non- democratic governments. 	<p>ACTIVITY 1: Comparing the duration of day at two different places in India.</p> <p>ACTIVITY 2: Debate Topic: “The French Revolution laid the foundation of Democracy”.</p> <p>ACTIVITY 3: Group Discussion & Presentation: Topic: ‘The US war on Iraq was illegal’</p>
JULY	L1(Economics) The Story of village Palampur. L2 (Pol. Science) What is democracy? Why democracy? L2 (Geography) Physical features of	<ul style="list-style-type: none"> Appreciate the importance of mechanized means of farming in creating the surplus produce. Understand the disparity in the existing distribution of land. Understand how different historical processes & forces have promoted 	<p>ACTIVITY 1: Project Work Draw a land distribution table with reference to school clearly indicating – -Total School area -Administrative Block -Academic wing etc.</p> <p>ACTIVITY2:Preparing an album, collage/ bulletin board or a wall paper on What makes a government democratic & non democratic.</p>

	India.	<p>democracy.</p> <ul style="list-style-type: none"> Understand the location of various physiographic divisions and their characteristic features 	<p>ACTIVITY 3: Power Point Presentation of physical features.</p>
AUGUST	<p>L3 (Geography) Drainage.</p> <p>L3 (Pol. Science) Constitutional Design.</p> <p>L2 (Economics) People as a resource.</p>	<ul style="list-style-type: none"> Understand the role of rivers in the evolution of human society. To appreciate its contribution to the mankind. Recognize that the constitution is the living document that under –goes changes. Familiarize themselves with the basic concepts like human capital formation, economic activities, types of unemployment. 	<p>ACTIVITY1: Group Discussion, Topic: Sharing of river waters.</p> <p>ACTIVITY2: Skit/ Role Play Topic:“ Racial Discrimination in South Africa”.</p> <p>ACTIVITY3: Debate: Topic:“Education is the most important factor in human resource development”.</p>
SEPTEMBER	L2 (History) Socialism in Europe and the Russian Revolution.	<ul style="list-style-type: none"> Comprehend the impact of Socialism on Russia and on other Countries. Relate the revolution to first world war, <p style="text-align: center;">SA I Exams</p>	<p>ACTIVITY1: Talk Show Topic: Collectivization of Farms.</p>
SA II OCTOBER	<p>L4 (Geography) Climate</p> <p>L5 (Geography) Natural Vegetation</p>	<ul style="list-style-type: none"> To familiarize the students about factors influencing the climate and explain the climate variation of our country and its impact on the life of the people. 	<p>ACTIVITY1:Picture analysis and finding relationship with human ACTIVITY. “To understand the relationship between climate and pattern of livelihood”.</p> <p>ACTIVITY2: Prepare a Scrap</p>

	and Wildlife.	<ul style="list-style-type: none"> To understand the relationship between climate and the growth of natural vegetation, significance of natural vegetation for human existence in the environment & how would life be without the natural vegetation. 	Book on migratory birds visiting our country.
NOVEMBER	<p>L6 (History) Peasants and Farmers.</p> <p>L6 (Geography) Population</p> <p>L4 (Pol. Science) Electoral Politics.</p> <p>L3 (Economics) Poverty as a challenge facing India.</p>	<ul style="list-style-type: none"> Comprehend different processes through which agrarian transformation may occur. Get familiarized with concepts/ideas of large scale farming, small scale production. To analyze the uneven nature of population distribution and show concern about the large size of our population. Values: Gender sens-sitivity -care and compa-ssion for all. Develop an appreciation of citizen's increased participation in electoral politics. Understand that poverty is a multidimensional concept within the rural and urban 	<p>ACTIVITY1:Prepare a case study on the life of a peasant.</p> <p>ACTIVITY 2: “ Nukkar Natak” on the issues related to girl child as a part of the ‘community outreach’programme Example- Nirbhaya</p> <p>ACTIVITY3: Election of Class Monitor</p> <p>ACTIVITY 4: Scrap Book Preparation Topic: Poverty alleviation plan for a district.</p>

		contexts.	
DECEMBER	<p>L7 (History) History & Sport: The story of Cricket</p> <p>L5 (Pol. Science) Working of the Institutions.</p> <p>L4 (Economics) Food Security in India</p>	<ul style="list-style-type: none"> • To Familiarize and suggest how sports also have a history and that it is linked up with the politics of power and domination. • To get sensitized to the key role of the parliament and its procedures. • Understand the parliam-entary system of executive's accountability to the legislature. • Understand the circumstances in which the government decided to move towards self sufficiency in food grains. • Appreciate and critically evaluate the role of government in ensuring food supply. 	<p>ACTIVITY1: Film screening. Screening of film "Lagan" can be organized for the class.</p> <p>ACTIVITY2: Project Work. Collect Information on working of the Institutions.</p> <p>ACTIVITY3: Newspaper reading and Diary entry on: Topic: Different prices in the farm market.</p>
JANUARY- FEBRUARY	<p>L5 (History) Pastoralists in the Modern World</p> <p>L6 (Pol. Science) Democratic Rights</p>	<ul style="list-style-type: none"> • Comprehend the nature of pastoral life and the change in the life of pastoralists. • To appreciate fundame-ntal rights of citizen. • To understand citizens have the freedom to hold 	<p>ACTIVITY1: Report on an imaginary interview based on forest acts.</p> <p>ACTIVITY2: Bulletin Board Display "To collect news clippings related to violation of rights and put them for display on the bulletin board".</p>

MARCH		meetings, rallies and demonstrations.	
		SA II Exams	

CLASS IX PHYSICS 2016-2017

MONTH

APRIL & MAY

CHAPTER

FORCE AND LAWS OF MOTION

Force and Motion

Newton's laws of Motion

Inertia of a body

Inertia and Mass

Momentum

Force and acceleration

Conservation of Momentum

Action and Reaction forces

LEARNING OBJECTIVE

To introduce concepts of inertia and mass and describe the three laws of motion and their applications.

ACTIVITY

* To establish relationship between weight of a rectangular wooden block lying on horizontal table and the minimum force required to just move it using a spring balance.

* To verify third law of motion using two spring balances.

*To verify first law of motion using carrom board.

MONTH

JULY

CHAPTER MOTION

State of Rest and Motion

Uniform Motion and Non uniform motion

Rate of change of Velocity

Graphs

Derivation of equations of Motion

Uniform Circular Motion

LEARNING OBJECTIVE

To enable the learners to understand the physical quantities that are essential

to describe motion of an object-
uniform or non uniform

ACTIVITY

* To organize 100m,200m and relay race. Then calculate various quantities like time, distance, displacement, speed, velocity etc. of the participants.

* To collect data from newspapers/Internet about the trends in the prices of shares of any company/gold/electricity and plot graphs to draw conclusions

MONTH

AUGUST

CHAPTER

GRAVITATION

Universal Law of Gravitation

Force of Gravitation of the Earth

Acceleration due to Gravity

Mass and Weight

Free Fall

LEARNING OBJECTIVE

To enable the learners to understand the concepts related to Gravitation.

ACTIVITY

To explain the concept of 'Free Fall' using a sheet of paper and a stone.

MONTH

SEPTEMBER

REVISION

MONTH

OCTOBER & NOVEMBER

CHAPTER

GRAVITATION

Thrust and Pressure

Archimedes Principle

Buoyancy

Elementary idea of relative density

LEARNING OBJECTIVE

To develop the ability to explain various phenomenon based on buoyancy and thrust & Pressure

ACTIVITY

*To determine the density of solid by using a spring balance and a measuring cylinder.

*To establish 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.

* To observe and compare the pressure exerted by a solid iron cuboid on fine sand/wheat flour while resting on its three different faces and to calculate the pressure exerted in the three different cases.

MONTH

DECEMBER

CHAPTER

WORK AND ENERGY

Work done by a force

Energy

Power

Kinetic and Potential energy

Law of conservation of energy

LEARNING OBJECTIVE

To enable the learners to understand the scientific meaning of work and energy

ACTIVITY

* To collect electricity bills for last five months .Plot graphs between the amount and month . List the causes of maximum and minimum bill with the month and find the steps to reduce the consumption of electricity accordingly.

* To prove the Law of conservation of Energy using a simple pendulum.

MONTH

JANUARY

CHAPTER

SOUND

Nature of sound and its propagation in various media

speed of sound

Range of hearing in humans

Ultrasound

Reflection of sound

Echo

SONAR

Structure of human ear

LEARNING OBJECTIVE

To make the students learn how sound is produced and how it is transmitted through a medium and received by our ear.

ACTIVITY

1. To verify laws of reflection of sound.

2. To determine the velocity of a pulse propagated through a stretched string/slinky

3. To explain the production of sound using a tuning fork and a glass of water.

MONTH

FEBRUARY

REVISION FOR SAI

CLASS: IX (CHEMISTRY)

MONTH

APRIL

CHAPTER

L-1 MATTER IN OUR SURROUNDINGS

LEARNING OBJECTIVES

- To familiarise with states of matter
- to compare the properties of the 3 states of matter at the particle level
- to develop sense of discipline

ACTIVITIES

GROUP ACTIVITY

Role Play: The class to be divided into 3 groups and each group to act like the state of matter assigned. Teacher to guide the students to depict interparticle distance, interparticle force of attraction, kinetic energy possessed by the particles, effect of heat and pressure etc.

ACTIVITY: To study the process of diffusion by

- a) adding ink in water and observe the effect of dilution on the colour of the solution
- b) Burning an incense stick (*Agarbatti*) at one corner of the classroom and observe its effect in the other corner.

MONTH

MAY

CHAPTER

L-1 (Continued)

LEARNING OBJECTIVES

- to enable the students to learn that
 - pressure and temperature determine the state of matter
 - the 3 states of matter are inter convertible
- To make the students apply the knowledge of latent heat to some real life situations.

ACTIVITIES

Activities to be performed in the Chemistry lab :

- To determine the melting point of ice and boiling point of water
- To demonstrate the process of sublimation by taking camphor and Naphthalene balls

MONTH

JULY

CHAPTER

L-2 IS MATTER AROUND US PURE

LEARNING OBJECTIVES

- To acquaint the students with different types of mixtures and their properties.
 - To connect classroom learning to life outside the school.
- *To make the students understand that life is a mixture of pleasure and pain.

ACTIVITIES

*Simple activities to be performed in the Chemistry laboratory to clarify the theoretical concepts taught in the class. eg. To prepare true solution of salt and water: colloidal solution of ink and water; suspension of sand and water etc.

*Demonstration based worksheets to be given.

MONTH

AUGUST

CHAPTER

L-2 IS MATTER AROUND US PURE (CONTINUED)

LEARNING OBJECTIVES

*To make the students appreciate that components of a mixture can be separated by using different physical methods of separation.

*Enable the students to differentiate between –a mixture and a pure substance,
-elements and compounds

taking suitable examples from everyday life to reinforce the concept.

ACTIVITIES

*Students to be asked to conduct a survey of their homes and prepare a list of various materials used in daily life. To classify these materials into elements, compounds and mixtures and then to prepare a survey report.

*Students to be asked to bring different types of mixtures from home and suggest the methods to separate butter from cream ,oil from water, dye from ink etc.

MONTH

SEPTEMBER

CHAPTER

PRACTICALS AND M.C.Qs BASED ON PRACTICALS
REVISION FOR SA-1

ACTIVITIES

*Experiments mentioned in the syllabus to be done in the Chemistry laboratory.

*WORKSHEETS: Practicals based multiple choice questions to be given.

*QUIZ Competition

MONTH

OCTOBER

CHAPTER

L-3 ATOMS AND MOLECLUES

LEARNING OBJECTIVES

*To make the students understand the concept of atoms and molecules.

*To enhance the thinking skills and inquisitiveness in the students.

*To raise awareness among the students about the way they feel and should react in a particular situation.

ACTIVITIES

*Samples of various elements and compounds to be shown in the class. Simple experiments related to the topics to be performed.

*Crossword puzzle to be solved by the students.

*Project on 'Role of Chemistry in daily life'.

MONTH

NOVEMBER

CHAPTER

L-3 ATOMS AND MOLECLUES

(CONTINUED)

L-4 STRUCTURE OF THE ATOM

LEARNING OBJECTIVES

To enable the students

- To understand the formation of a compound.
- To write the chemical formulae if valencies are known.
- To sensitize the students to understand the importance of gaining good qualities and losing the undesired ones.

- To develop scientific temperament among the students.
- To enable the students to appreciate the historical aspect of development of structure of an atom.

ACTIVITIES

***ROLE PLAY:** To assign role of an element to each student in sequence of their roll numbers. Each student to hold 2 placards-1 with the symbol in the right hand and the other with the valency in the left hand. Keeping the symbols in place, students should criss cross their valencies to form formulae of compounds.

***COLLAGE MAKING COMPETITION:** Collect the photographs of scientists who have worked in the field of Chemistry and make a collage. Also mention the contribution made by each of them.

MONTH

DECEMBER

CHAPTER

L-4 STRUCTURE OF THE ATOM

(CONTINUED)

LEARNING OBJECTIVES

*To enable the students to understand the current model/structure of an atom.

*To develop the feeling of togetherness.

ACTIVITIES

GROUP ACTIVITY: Students to be involved in making Thomson's model and Bohr's model of an atom using different materials

MONTH

JANUARY

CHAPTER

L-4(continued)

L –Natural Resources

LEARNING OBJECTIVES

To enable the students

- To develop decision making and critical thinking ability
- To write electronic configuration of an atom when atomic number is known

To make the students understand that the world is bountiful and full of exciting processes

ACTIVITIES

To build static model of electronic distribution in different orbits of first 20 atoms using wire , beads , cardboard and drawing pins

Group discussion on Green House Effect ,Ozone Layer Depletion, OTBA topics

MONTH

FEBRUARY

CHAPTER

REVISION FOR SA 2

LEARNING OBJECTIVES

To develop confidence among the students

ACTIVITIES

Quiz competitions on all the topics

Sample papers to be discussed

SUBJECT: BIOLOGY

Month

April

The fundamental unit of life

Learning objectives

To understand that cell is the basic unit of life

ACTIVITY

1. Make a 3D model of an animal cell/Plant cell/ Prokaryotic cell.
2. Study osmotic movements by
 - 1) placing raisin in plain water.

ii) placing raisin in salt/ sugar solution.

Month

May

Chapter

Tissues

Plant tissues

Learning objectives

1. To understand the significance of different plant tissues and relate it to their structure and location.

ACTIVITY

Make a diagrammatic tabular account of different plant tissues.

Name, Location (paste the picture of plant part), Structure (draw diagram of T.S.), Function

Month

July

Chapter

Animal Tissues

Learning objectives

1. To understand function and structure of different Animal Tissues.

ACTIVITY

1. Diagrammatically show the difference between the three types of muscle fibers.

2. List muscle building foods. Discuss the Role of a gym in building muscles.

Month

August

Chapter

Improvement in Food Resources

Learning objectives

To make the students aware about the various sources of food and components of food.

To make the students understand the various ways to improve food quality and quantity.

ACTIVITY

Assuming yourself to be an agricultural scientist, give a speech on scientific ways to solve the current global food crisis and improve our crop production.

Month

September

PRACTICAL, REVISION & FIRST TERM EXAM

Month

OCTOBER

Chapter

Why do we fall ill?

Learning objectives

To appreciate the contribution of science towards conquering illness.

To develop awareness and concern for a healthy environment.

ACTIVITY

A. Students (in pairs) will be asked to make a list of the diseases that they or their family members have suffered from during the last month. They will be asked to categorise these diseases as I) acute or chronic

ii) infectious or non infectious

At the end their outcomes will be discussed in the class.

B. Ask your parents to show you your vaccination card. Make a list of vaccines that you have received and diseases to which you are immune. Also find out the causative agent, symptoms of these diseases.

C. Seminar on '**Health and Its Failure**'

Directions: The students will divide themselves into a group of 8-10 for a collective research/study on the given topic. The topic will be divided into the following sub-topics for presentation:

1. Significance of health
2. Personal and community issues for health
3. Difference between healthy and disease-free person

Month

November

Chapter

Diversity in the Living Organisms (1st half)

Learning objectives

To understand the characteristics of various living organisms.

To make students appreciate the rich biodiversity and develop love for living organisms.

ACTIVITY

Find out the scientific names of any five plants found in your school and five common animals.

Month

December

Chapter

Diversity In The Living Organisms (IInd Half)

Learning objectives

To understand the features of the different phylums of animal kingdom

ACTIVITY

Students will be asked to divide themselves in groups of 3 students each. They will be allotted a phylum of Animal Kingdom. They will be asked to collect information of the phylum (its characteristic features, examples etc.) and present their phylum in class as role play/ wall magazine etc.

Month

January

Chapter

Natural Resources

Learning objectives

To make the students understand the cyclic movement of nutrient elements through the living and non-living components of biosphere.

To develop concern about different types of pollution and their harmful effects on health.

ACTIVITY

Students will be asked to collect information about the AQI (Air Quality Index) from newspapers or from CPCB(Central Pollution Control Board) website on daily basis for 15 days. Using this collected data, plot a graph showing daily change in levels of different pollutants. Prepare a report highlighting your findings and discuss the harmful effects of these pollutants on health.

Month

February

PRACTICALS & REVISION FOR SUMMATIVE ASSESSMENT-II

MUSIC SYLLABUS

CLASS IX

Month	content
APRIL-MAY	<ul style="list-style-type: none">• Practice of Alankar• Prayer• Definition of Saptak , Swar ,laya• Indian and western notes• Types of instruments
JULY-AUGUST	<ul style="list-style-type: none">• Devotional Song• Patriotic Song• Prayer• Taal keherva
SEPTEMBER-OCTOBER	<ul style="list-style-type: none">• Folk Song• Raga Bhupali –Swar Vistar Parichay• Guru Vandana• Taal Dadra
NOVEMBER-DECEMBER	<ul style="list-style-type: none">• Christmas Song• Teen Taal,• Childrens day Song• Raga Yaman-Swar Vistar Parichay
JANUARY-FEBRUARY	<ul style="list-style-type: none">• Revision of Alankars• Revision of Prayers• Revision of Raga Bhupali• Revision of Raga Yaman• Revision of Taals
March	Revision

Class IX-Drawing

Month

April And May

Syllabus

Still Life & Landscape

Month

July

Syllabus

Compositions & Posters

Month

August

Syllabus

Human Sketching & Portraits

Month

September

Syllabus

Half Yearly Exams

Month

October

Syllabus

Applied Arts-Making Paper Bags & Folders

Month

November

Syllabus

Calligraphy And Greeting Cards

Month

December

Syllabus

Portraits & Pencil Sketching

Month

January & February

Syllabus

Animals & Birds Study

Physical Education

Objectives:-

- 1 Acquisition of interest in athletics .
- 2.To improve the physical and mental development and correct the health habits .
3. Identify and plan strategies to achieve goals.

Regular Events:-

- 1.Warming up exercise for 10 minutes.
2. Four to five round of play field an light exercise of body.
3. To develop the quality of leadership, discipline and sense of belongingness.

April-May- Drill and marching - Drill on free hand exercise, mass P.T

July - Team Game - Volleyball

Terminology - 1. Rotation - After every change of service

1. Boosting - boosting means to lift the ball.

August- Basket ball :- Terminology - 1.Violation

2.Travelling

3. Carrying

KHO-KHO - 1.kho-kho game with proper skills.

KABBADI - 1.How to take lona point.

2.Proper game.

September–Athletics- (Track events)

1. 100m, 2. 200m, 3. 400m.4. 4*100m. relay.

October- Athletics- (Field Event)

1. Long Jump

2. Shot put

3. Discus throw

November– Mind game - Chess , carrom

December - Indoor games - Table Tennis:-Grips - 1. Orthodox grip 2. Pen hold grip

Badminton :- grips of rackets, stance , foot work.

January-February - Hand ball , Throw ball

Terminology_:- Hand ball - 1.Six meter line 2. Nine meter line

