

**THE AIR FORCE SCHOOL: SUBROTO PARK : DELHI CANTT-110010**

**Class – IX**

**Sub: Chemistry**

**Weekly Syllabus**

**Academic Session 2023-24**

Month	Week	Dates		Days	No of Periods	Chapter	Contents	Syllabus
Apr-23	I	01	01-Working Saturday (Student)	01	1	Chapter1: Matter in our surroundings	Introduction	
	II	03-07	04 - Mahavir Jayanti 07 – Good Friday	03	2	Chapter1: Matter in our surroundings	1.1 Physical nature of matter Matter is made of particles How small are the particles of matter?	
	III	10-14	14 - Ambedakar Jayanti	04	2	Chapter1: Matter in our surroundings	1.2 Characteristics of particles of matter Particles of matter have spaces between them Particles of matter are continuously moving	
	IV	17-21		05	2	Chapter1: Matter in our surroundings	1.2 Characteristics of particles of matter contd. Particles of matter attract each other 1.3 States of matter	
	V	24-29	29-Working Saturday (Student)  29 – Parent Orientation VI & IX	06	2	Chapter1: Matter in our surroundings	1.2 States of matter The solid state	
May-23	I	01-05	05 – Budha Purnima  01-04 : ES-1 (XII)/ CT-1 (X)	04	2	Chapter1: Matter in our surroundings	1.3 States of matter contd. The liquid state 1.3 States of matter contd. The gaseous state	ES-1 (XII)/ CT-1 (X) Date: 01-08 May
	II	08-12	08 : ES-1 (XII)/ CT-1 (X) 11,12 – The Quest	05	2	Chapter1: Matter in our surroundings	1.4 Can matter change its state? Effect of change of Temperature Effect of change of pressure To determine the melting point of	

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	III	15-20	20- Working Saturday (Open House X & XII)	06	2	Chapter1: Matter in our surroundings	ice and the boiling point of water 1.5 Evaporation 1.5.1 Factors affecting evaporation	
***** SUMMER BREAK 22 MAY -30 JUN 2023 *****								
Jul-23	I	01-	01- School reopens for staff	01				<b>PT-I</b> Class VI-X Date: 07 Jul – 19Jul  <b>ES-2 (XII): 07 Jul – 19Jul</b>  PT 1 SYLLABUS  CHAPTER 1: MATTER IN OUR SURROUNDINGS
	II	03-07		05	2	Chapter2: is matter around us pure?	Introduction 2.1 What is a mixture? 2.1.1 Types of mixtures 1 A true solution of common salt, sugar and alum 2 A suspension of soil, chalk powder and fine sand in water	
	III	10-14		05	2	Chapter2: is matter around us pure?	3. A colloidal solution of starch in water and egg albumin milk in water and distinguish between these on the basis of : <ul style="list-style-type: none"> <li>• Transparency</li> <li>• Filtration criterion</li> <li>• Stability</li> </ul> 2.2 What is a solution? 2.2.1 Concentration of a solution	
	IV	17-22	22 – Working Saturday (Students)	06	2	Chapter2: is matter around us pure?	2.2.2 What is a suspension? PRACTICAL: 1 A true solution of common salt, sugar and alum 2 A suspension of soil, chalk powder and fine sand in water 3A colloidal solution of starch in water and egg albumin milk in water and distinguish between these on the basis	

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							of : • Transparency • Filtration criterion • Stability	
	V	24-28	29-Muharram	05	2	Chapter2: is matter around us pure?	2.2.3 What is a colloidal solution? 2.3 Separating the components of a mixture	
	VI	31		01	1	Chapter2: is matter around us pure?	2.3.1 How can we obtain colored component (dye) from blue/black ink?	
Aug-23	I	01-05	05 – Working Saturday (Open House (VI-X), XII)	05	2	Chapter2: is matter around us pure?	2.3.2 How can we separate cream from milk? 2.3.3 How can we separate a mixture of two immiscible liquids?	
	II	07-11		05	2	Chapter2: is matter around us pure?	2.3.4 How can we separate a mixture of salt & ammonium chloride 2.3.5 Is the dye in black ink a single color? 2.3.6 How can we separate a mixture of two miscible liquids? Perform the following reactions and classify them as physical or chemical changes: a) Iron with copper sulphate solution in water b) Burning of magnesium ribbon in air c) Zinc with dilute sulphuric acid d) Heating of copper sulphate crystals e) Sodium sulphate with barium chloride in the form of their solutions in water	
	III	14-18	15 – Independence Day	04	2	Chapter2: is matter around us pure?	2.5.7 How can we obtain different gases from air? 2.3.8 How can we obtain pure	

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							copper sulphate from an impure sample?	
	IV	21-26	24,25-Class Test 26-Working Saturday (Students) 26-Annual Prize Distribution	06	2	Chapter2: is matter around us pure?	2.4 Physical and Chemical Changes 2.5 What are the types of pure substances? 2.5.1 Elements 2.5.2 Compounds	<b>ES-1 (XI): 21 Aug – 25 Aug</b>
	V	28-32	<b>30-Raksha Bandhan</b>  28,29 -Class Test	03	2	Chapter2: is matter around us pure?	Revision Differentiate between mixture and compound Using iron fillings and sulphur powder. Distinguish between these on the basis of: (a)Appearance., homogeneity and heterogeneity (b)Behaviour towards a magnet (c)Behaviour towards carbon disulphide as a solvent (d)Effect of heat	
Sep-23	I	01	01 -Class Test	01	1		Revision	
	II	04-08	<b>07-Janmashtami</b>	04		Mid Term/ HYE Exam		<b>Mid Term (PT-II)/ HYE</b> <b>Date 11-23 Sep</b>  PT II SYLLABUS  CHAPTER 1: MATTER IN OUR SURROUNDINGS
	III	11-16	16 – Working Saturday (Students)	06				
	IV	18-23	23 – Working Saturday (Students)	06				
	V	25-30	<b>28-Milad-un-Nabi</b>	04	2	Chapter 3: Atoms and Molecules	Introduction 3.1 Laws of chemical combination 3.1.1 Law of conservation of	

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							mass 3.1.2 Law of constant proportion	CHAPTER 2: IS MATTER AROUND US PURE?
Oct-23	II	02-07	02-Mahatma Gandhi's Birthday 07-Annual Prize Distribution	05	2	Chapter 3: Atoms and Molecules	3.2 What is an atom? 3.2.1 what are the modern day Symbols of atoms of different Elements? 3.2.2 atomic mass	
	III	09-14	14- Working Saturday(Open House VI-XII)	06	2	Chapter 3: Atoms and Molecules	3.2.3 how do atoms exist? 3.3 What is a Molecule? 3.3.1 molecules of elements Verification of the law of conservation of mass in a chemical reaction	
	IV	16-20		05	2	Chapter 3: Atoms and Molecules	3.3.2 molecules of compounds conservation of mass in a chemical reaction	
	V	23-27	23- Autumn Break 24- Dussehra 28-Maharishi Valmiki's Birthday	03	1	Chapter 3: Atoms and Molecules	3.3.3 what is an ion? 3.4 writing chemical formulae	
	VI	30-31		02	1	Chapter 3: Atoms and Molecules	3.4 writing chemical formulae	
*** Autumn Break 23 Oct 2023 ***								
Nov-23	I	01-04	01- Karwa Chouth 04 - Working Saturday (Students)	03	2	Chapter 3: Atoms and Molecules	3.4.1 formulae of simple Compounds Mixture and compound	
	II	06-10	07 - Annual Day	05	2	Chapter 3: Atoms and Molecules	3.5.1 molecular mass 3.5.2 formula unit mass	

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	III	13-18	11-15 – Diwali Break	03	2	Chapter 3: Atoms and Molecules	3.5.3 mole concept 4.4.4 Valency	PT-III (VI-VIII): 17 Nov-14 Dec PT-III (IX & X): 20 Nov-30 Nov ES-2 (XI): 21 Nov-14 Dec MPB (XII): 20 Nov-30 Nov
	IV	20-24		05	2	Chapter 3: Atoms and Molecules	Revision	Dec MPB (XII): 20 Nov-30 Nov
	V	27-30	27 – Guru Nank’s Birthday	03	1	Chapter 3: Atoms and Molecules	Revision	PT III
Dec-23	I	01-02	01,02 – Annual Athletic Meet	02	1	Chapter4: structure of the atom	4.1 Charged particle in atom 4.2 The structure of an atom 4.2.1 Thomson’s model of an atom	CHAPTER 1: MATTER IN OUR SURROUNDINGS
	II	04-09	09 – Sports Day	06	2	Chapter4: structure of the atom	4.2.2 Rutherford’s model of an Atom. 4.2.4 Neutrons	CHAPTER 2: IS MATTER AROUND US PURE?  CHAPTER 3: ATOMS AND MOLECULES
	III	11-16	16-Working Saturday, Open House (IX,X & XII)	06	2	Chapter4: structure of the atom	4.3 How electrons are distributed in the different orbits?	
	IV	18-22	20-22 – TAFS MUN 24,25 – Christmas Holidays	05	2	Chapter4: structure of the atom	4.3 How electrons are distributed in the different orbits? Contd. Physical and chemical changes	
*** Winter Break from 26 Dec to 05 Jan 2024 ***								
Jan-24	I	08-12		05	2	Chapter4: structure of the atom	4.5 Atomic Number and Mass Number 4.6 Isotopes 4.6.1 Isobars	Pre-Board (X & XII): 09 Jan-23 Jan
	II	15-20	20-Working Saturday,	06	2	Chapter4: structure	14.1 The breath of life: Air	

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			Open House (VI-VIII, XI)			of the atom	14.2 Water: A wonder liquid	
	III	22-27	26-Republic Day 27- Farewell XII	05	2	Chapter4: structure of the atom	14.3 Mineral rich in soil	
	IV	29-31		03	1		Revision	
Feb-24	I	01-03	01,02- Class Test  03-Working Saturday, Citation Ceremony, Open House (X& XII)	03	2		Revision	<b>Annual Exam Class IX &amp; XI – 07 Feb-21 Feb 2023</b>  ANNUAL EXAM SYLLABUS  CHAPTER 1: MATTER IN OUR SURROUNDINGS  CHAPTER 2: IS MATTER AROUND US PURE?  CHAPTER 3: ATOMS AND MOLECULES  CHAPTER 4: STRUCTURE OF ATOM
	II	05-09	05-08- Class Test	05	2		Revision	
	III	12-16		05				
	IV	19-23		05				
	V	26-29		04				
Mar-24	Annual Exam Classes VI-VIII – 26 Feb-11 Mar 2024							

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***Note: The examination syllabus as mentioned above is to be considered Tentative. The final syllabus for each exam will be uploaded on the website along with the Date Sheet at the time of the examination.***