

**CLASS-IX SYLLABUS BREAK-UP
SCIENCE**

MONTHS	SUBJECTS	CH. NO.	NAME OF THE CHAPTER	SUB-TOPICS	NO. OF PERIODS
APRIL- MAY	PHYSICS	8	MOTION	<ul style="list-style-type: none"> • 8.1 Describing motion Motion along a straight line. Uniform and non-uniform motion • 8.2 Measuring rate of motion 8.2.1 Speed with direction Numericals based on speed • 8.3 Rate of change of velocity • 8.4 Graphical representation Distance-time graph Velocity –time graph • 8.5 Equation of motion by graphical method Equation for v-t relation Equation for position- time relation Equation for position- velocity relation • 8.6 Uniform circular motion 	<p align="right">02</p> <p align="right">01</p> <p align="right">01</p> <p align="right">01</p> <p align="right">01</p> <p align="right">01</p> <p align="right">02</p> <p align="right">01</p> <p align="right">01</p> <p align="right">01</p> <p align="right">01</p> <p align="right">Total=13</p>
	CHEMISTRY	01	MATTER IN OUR SURROUNDINGS	<ul style="list-style-type: none"> • Introduction • Physical Nature of matter • Characteristics of particles of matter • States of matter • Can matter change its state? • Evaporation: Factors affecting evaporation and its application • NCERT and EXEMPLAR Exercise discussion 	<p align="right">01</p> <p align="right">01</p> <p align="right">01</p> <p align="right">01</p> <p align="right">03</p> <p align="right">03</p> <p align="right">02</p> <p align="right">Total=12</p>
	BIOLOGY	05	CELL-THE FUNDAMENTAL UNIT OF LIFE	<ul style="list-style-type: none"> • Cell as a basic unit of life, Prokaryotic and eukaryotic cells, Multicellular organisms • Cell membrane and cell wall • Cell organelles; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus, nucleus • Chromosomes - basic structure, number • NCERT and EXEMPLAR Exercise discussion 	<p align="right">01</p> <p align="right">01</p> <p align="right">02</p> <p align="right">01</p> <p align="right">01</p> <p align="right">01</p>

				<ul style="list-style-type: none"> Revision 	Total=07
		6	TISSUES	<ul style="list-style-type: none"> Plant tissues 	Total=04

PRE MID TERM TEST 14TH JULY, 2023

MID TERM

MONTHS	SUBJECTS	CH. NO.	NAME OF THE CHAPTER	SUB TOPICS	NO. OF PERIODS
JULY-SEPT.	PHYSICS	9	FORCE AND LAWS OF MOTION	<ul style="list-style-type: none"> CHAPTER 9: FORCE AND LAWS OF MOTION 9.1 balance and unbalanced forces 9.2 First law of motion 9.3 Inertia and mass 9.4 Second law of motion 9.4.1 Mathematical formulation of second law of motion And Numerical based on it 9.5 Third law of motion 9.6 Conservation of momentum and numerical based on it 	01
					01
					01
					02
					01
		02	Total=08		
		10	GRAVITATION	<ul style="list-style-type: none"> CHAPTER 10: GRAVITATION 10.1 GRAVITATION (TILL ARTICLE 10.4) Universal law of gravitation Importance of universal law of gravitation and numericals based on it	01
	02				
	01				
	01				
	02				
				<ul style="list-style-type: none"> 10.2 Free fall 10.2.1 To calculate the value of “g” 10.2.2 Motion of objects under the influence of gravitational force of the earth and numericals 10.3 Mass 10.4 Weight 10.4.1 Weight of an object on the moon and numericals to calculate the same 	01
					02
					Total=10
		02	IS MATTER AROUND US PURE?	<ul style="list-style-type: none"> Pure substance. <ul style="list-style-type: none"> ✓ Elements- Metal, nonmetal and metalloids ✓ Compounds- Organic and inorganic compounds 	01
					01

	CHEMISTRY			<ul style="list-style-type: none"> • Mixture <ul style="list-style-type: none"> ✓ Homogeneous mixture. ✓ Heterogeneous mixture. • Solution <ul style="list-style-type: none"> ✓ True solution ✓ Colloidal solution ✓ Suspension ✓ Concentration of a solution (Numerical) • Separation techniques <ul style="list-style-type: none"> ✓ Evaporation ✓ Centrifugation ✓ Separation by separating funnel ✓ Sublimation ✓ Chromatography ✓ Simple and fractional distillation ✓ Crystallization • Physical and chemical change. • NCERT and EXEMPLAR Exercise discussion 	<p>02</p> <p>04</p> <p>03</p> <p>01</p> <p>02</p> <p>Total=14</p>
	BIOLOGY	6	TISSUES	<ul style="list-style-type: none"> • Animal tissues • NCERT and EXEMPLAR Exercise discussion • Revision 	<p>04</p> <p>01</p> <p>02</p> <p>Total=07</p>
		14	NATURAL RESOURCES	<ul style="list-style-type: none"> • Air for respiration, for combustion, for moderating temperatures, Movements of air and its role in bringing rains across India • Air, water and soil pollution (brief introduction) • Bio-geo chemical cycles in nature • Water • Oxygen • Carbon • Nitrogen • Holes in ozone layer and the probable damages • NCERT and EXEMPLAR Exercise discussion • Revision 	<p>01</p> <p>02</p> <p>02</p> <p>01</p> <p>01</p> <p>Total=07</p>

MID TERM TEST 14TH SEPTEMBER, 2023

				<ul style="list-style-type: none"> • Writing chemical formulae. <ul style="list-style-type: none"> ✓ Writing Chemical formula of simple Molecular Compounds ✓ Writing Chemical Formulae of Simple Ionic Compounds ✓ Writing Chemical Formulae of Simple Ionic Compounds Containing Compounds Ions • Mole concept <ul style="list-style-type: none"> ✓ Numericals related to: <ul style="list-style-type: none"> ○ Molecular mass ○ No. of moles ○ No. of particles/atoms/molecules • Practices numericals of all types. • NCERT and EXEMPLAR Exercise discussion 	<p>03</p> <p>04</p> <p>02</p> <p>Total=14</p>
	BIOLOGY	7	DIVERSITY IN LIVING ORGANISMS	<ul style="list-style-type: none"> • Diversity of plants and animals - basic issues in scientific naming, basis of classification • Hierarchy of categories / groups, Major groups of plants (salient features) (Bacteria, Protista, Fungi, Thallophyta, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms) • Major groups of animals (salient features) (Non-chordates up to phyla and chordates up to classes) • NCERT and EXEMPLAR Exercise discussion • Revision 	<p>01</p> <p>03</p> <p>04</p> <p>01</p> <p>02</p> <p>Total=11</p>
POST MID TERM TEST 13TH DECEMBER 2023					
DEC- JAN	PHYSICS	12	SOUND	<ul style="list-style-type: none"> • Chapter 12-Sound • 12.1 Production of sound Sound needs material medium to travel Sound waves are longitudinal waves Characteristics of sound wave Speed of sound in different media • 12.2 Propagation of sound • 12.3 Reflection of sound <ul style="list-style-type: none"> 12.3.1 Echo 12.3.2 Reverberation 12.3.3 Uses of multiple reflection of sound • 12.4 Range of hearing • 12.5 Application of sound 	<p>01</p> <p>01</p> <p>01</p> <p>01</p> <p>01</p> <p>02</p> <p>01</p>

			<ul style="list-style-type: none"> 12.5.1 SONAR 12.6 Structure of human ear 	<p>01</p> <p>01</p> <p>Total=10</p>
	CHEMISTRY	04	STRUCTURE OF ATOM <ul style="list-style-type: none"> Charge particle of matter(Electrons, protons and neutrons) Atomic models. <ul style="list-style-type: none"> ✓ Thomson’s model of an atom with limitations. ✓ Rutherford’s model of an atom with limitations. ✓ Bohr’s model of an atom. Electronic configuration: Bohr- bury rule. Valency. Atomic number and mass number. Representation of an atom Isotopes and isobars. <ul style="list-style-type: none"> ✓ Average atomic mass. ✓ Applications of isotopes. NCERT and EXEMPLAR Exercise discussion 	<p>04</p> <p>01</p> <p>01</p> <p>01</p> <p>01</p> <p>02</p> <p>Total=10</p>
	BIOLOGY	15	IMPROVEMENT IN FOOD RESOURCES <ul style="list-style-type: none"> Plant breeding and selection for quality improvement and management, Organic farming Plant production management Plant protection management Animal breeding and selection for quality improvement and management NCERT and EXEMPLAR Exercise discussion Revision 	<p>02</p> <p>02</p> <p>01</p> <p>02</p> <p>01</p> <p>01</p> <p>Total=09</p>
		13	WHY DO WE FALL ILL? <ul style="list-style-type: none"> Health and its failure Infectious and Non-infectious diseases, their causes and manifestation Diseases caused by microbes (Virus, Bacteria and protozoans) and their prevention, Principles of treatment and prevention. Pulse Polio programmes NCERT and EXEMPLAR Exercise discussion Revision 	<p>01</p> <p>01</p> <p>02</p> <p>01</p> <p>01</p> <p>Total=06</p>
FEB	REVISION AND PROBLEM SOLVING SESSION			10
	ANNUAL EXAMINATION MARCH 2024			

*Note- Change in Topics and sub topics may take place as per latest instructions by CBSE.

*Note- Practical Experiments will be discussed along with the theory classes as per the requirement.

Science Department