BIFURCATION OF SYLLABUS

SUBJECT : SCIENCE CLASS : CLASS VIII

TEXT BOOK - NCERT

TERM-1	ASSESMENT	MONTH	CHAPTER & Sub Topics	LEARNING OBJECTIVES	ACTIVITIES	SYLLABUS COVERAGE
APRIL TO SEPTEMBER			Ch 1 - Crop Production and Managemen t Agricultural Practices Basic Practices of crop production: i. Preparation of soil ii. Sowing iii. Adding Manure and Fertilisers iv. Irrigation v.	1. Classify the major crops based on the seasons they are sown in the field to explain the months Kharif and Rabi crops are cultivated. 2. Sequence the tasks involved in cultivating the crop to list major steps of agricultural practices. 3. Compare the advantages of agricultural implements	 Preparing a table or a chart on different irrigation practices and sources of water in different parts of India. Preparing herbarium specimens of some crop plants and seeds Activity to separate healthy seeds for sowing. 	
		APRIL	Protection	used in agricultural field	•Activity to observe	

vi. Harvesting vii. Storage	to justify the variey of agricultural practices. 4. Distinguish between manure and fertilisers to identify ways in which nutrients in soil is replenished. 5. Evaluate how weeds adversely affects the growth of plants and Describes the process of crop rotation to explain ways in which nutrients in soil is replenished. 6. Compare and analyse the traditional and modern methods of irrigation. 7. Elaborate the process of harvesting and Storage of grains. 8. Identify commonly known food items based their sources to define animal husbandry	the effect of manure and fertiliser on the growth of seedlings. • Model on Green revolution or Modern Irrigation. • Visit a farm, nursery or a garden nearby to gather information on Agricultural Practices. • Enrichment Exercises • Ncert Exercises • Worksheets.	
Ch 2 - Microorgani			
sms : Friend			
and Foe	1. Categorize and	• To observe,	
Microorgani	describe the	sketch and study	
sms	comparative features of	the various	
Where do	types of	microorganisms	

Microorgani microorganisms. (bacteria, alg	gae,
sms Live? • 2. Elucidate the reason fungi, and	
Microorgani for increasing volume protozoa) via	а
sms and Us when yeast is added to permanent s	slides.
• Harmful dough in baking • Activity to s	study
Microorgani industry to explain the fermenta	ation of
sms fermentation. sugar by year	st cells.
• Food 3. Define Pathogens and • Activity to	show
Preservatio Explain the role of the presence	e of
n antibiotics and microorganis	sms in
Nitrogen vaccinations in fighting moist soil.	
Fixation with diseases caused by •Experiment	to
• Nitrogen microbes. show fermer	ntation
cycle 4. Describe how of dough by	yeast
mosquitoes spread cells.	
malaria and dengue to • Role play: '	II
explain the role of Microbes and	d Man"
carriers in spreading • Clay model	l
communicable disease. making of	
5. List examples of microbes.	
diseases in humans, • To create a	a
plants and animals microbial	
caused by zoo/museum	n.
microorganisms in order • To observe	the
to explain the harmful growth of Rh	•
effects of • Worksheet	
microorganisms. Ncert + Enric	chment
6. List various methods Exercises.	
of preserving food in	
order to demonstrate	
the restriction of growth	
of microorganisms.	
7. Illustrate the process	
of fixing the nitrogen	
back in soil to explain	

		the role of		
		microorganisms in		
		increasing soil fertility		
		and to balance the		
		concentration of		
		nitrogen back in		
		atmosphere.		
	Ch 3 -	1. Enlist different types	 Art of collecting, 	
	Synthetic	of synthetic fibres and	designing and	
	Fibres and	their characteristics in	pasting different	
	Plastics	order to explain their	pieces of fabrics in	
	(Rationalize	specific uses.	an activity book.	
	d)	2. Distinguish between	Activity to	
	What are	Synthetic and Natural	compare the tensile	
	Synthetic	fibres based on their	strength of	
	Fibres	properties.	different fibres of	
	Types of	3. List characteristics of	same length and	
	Synthetic	plastics ability to bend	same thickness.	
	Fibres	to differentiate	Activity to	
	•	between thermoplastics	compare the water	
	Characterist	and thermosetting	absorbing capacity	
	ics of	plastics.	of natural fibre and	
	Synthetic	4. Differentiate between	synthetic fibre.	
	Fibres	plastics based on their	 Article writing on 	
	 Plastics 	ability to decompose in	green fabrics OR	
	 Plastics as 	order to explain why	Poster Making on 5	
	Materials of	plastics are a threat to	R Principle / "Say	
	Choice	the environment.	NO to plastic with	
	Plastics		slogan	
	and the		Model Making -	
	Environmen		Best Out Of Waste.	
	t.		Enrichment.Exerci	
			ses • Ncert	
			Exercises.	
May			 Worksheets. 	

Normet ona • Pr Pro of N and Met • Cr Pro of N and Met • Us Met	tals and tals (Rati lized) hysical perties Metals Non- tals hemical perties Metals Non- tals ses of tals and	1. Categorize the commonly known materials as Metals and Non-Metals in order to explain their physical properties. 2. Differentiate between the commonly known materials based on their ability to be bent and formed into sheets, be drawn into wires, ability to produce rininging sound and to shine, ability to conduct	 To observe the Physical and Chemical Properties of Metals and Non-Metals. Activity to show that metals are malleable and non-metals are brittle. Activity to show that metals are good conductors of electricity while 	
Nor	n-Metals	ability to conduct electricity and heat in order to define and analyse the various	non-metals are poor conductors of electricity. • Activity to show	
		properties of metal and non-metals. 3. Apply the concept of	that metal reacts with oxygen to form basic oxides.	
		reactivity of a metal to predict if a given metal will displace other metal or not in displacement	 Activity to study chemical reactions of metals and non- metals with dilute 	
		reaction. 4. Predict the utility of a given material for a	acids and bases.Activity to study displacement	
		specific task to reinforce the physical and chemical properties of	reactions of Zn, Fe and Cu metals. • Working model	
		metals and non-metals	making of simple	

			electrical circuit to study metal conductivity. • Visit a blacksmith and observe how metals are moulded. • Locate the Indian states where mining of minerals are done on the physical map of India. • Worksheets • Ncert + Enrichment Exercises	
PT-1 Max M: 40 (Weightage 5m	Ch 5 - Coal and Petroleum • Coal • Petroleum • Natural Gas • Some Natural resources are Limited	1. Classify natural resources based on their ability to replenish in order to distinguish between inexhaustible and exhaustible natural resources. 2. Describe the process of formation of coal to explain why coal is an exhaustible natural	 Project: To make a report on the formation of fossil fuels and petroleum. Activity to study exhaustible natural resources. Activity to study destructive distillation of coal. 	30% of Term1

	3. Classify different constituents of petroleum according to their use in daily life in order to deserve various by products of petroleum. 4. Infer why gas, oil and water are found in particular sequence in location where petroleum is found in order to explain the difference in their densities. 5. List the useful by products after processing coal to explain that natural resources can be used to obtain useful prodcts other than fuel.	places in the outline map of India where coal, petroleum and natural gases are found. • To find out the locations of major thermal power plants in India. • Worksheets. • Ncert Exercises. • Enrichment Exercises.	
Ch 6 - Combustion and Flame • What is	Explain the process of combustion in order to	• Experiment to show that oxygen	
Combustion • How Do We Control Fire?	describe the role of fuel and oxygen in the process as necessary conditions for	(air) is necessary for combustion.Activity to find whether a given	

	•Types Of Combustion • Flame • Structure Of A Flame • What is a Fuel • Fuel Efficiency	combustion to take place. 2. Compile and list the commonly known inflammable substances to explain that certain substance catch fire. 3. Define ignition temperature and differentiate between types of combustion to assess rapid, spontaneous combustions and explosion. 4. List the conditions necessary for producing fire to discover how combustible materials can be prevented from catching the fire. 5. Explain the different parts of flame in order to explain why goldsmiths blow the outer zone a flame to melt gold and silver. 6. Compare the calorific value of commonly used fuel to examine fuel efficiency. 7. List harmful byproducts of burning fuel to be aware of its harmful effects on	combustible or non-combustible. • Activity to show that a combustible substance will not catch fire if its temperature is lower than its ignition temperature. • Activity to show that the outer zone is the hottest part of candle flame. • Activity to show the presence of unburnt carbon particles in the middle zone of candle flame. • Activity to show the presence of wax vapours in the dark inner zone of a candle flame. • Worksheets. • Ncert Exercises. • Enrichment Exercises.	
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			individuals and	
			environment.	
		Ch 7 -	1. List causes of	 Activity to identify
		Conservatio	deforestation to reflect	and classify the
		n of Plants	on its rampant existence	animals and plants
		and	despite forest being	in the following
		Animals	essential to life.	categories: (a)
		Deforstatio	2. Describe the process	Endangered
		n and Its	of desertification and	animals and plants.
		Causes	droughts to elaborate	(b) Endemic
		•	the consequence of	species. (c)
		Consequenc	deforestation. 3.	Threatened but not
		es Of	List the flora and fauna	endangered. (d)
		Deforestatio	of various regions to	Extinct Species and
		n •	decribe the terms	to paste pictures.
		Conservatio	endemic, endangered	 Activity to write a
		n Of Forest	and extinct species.	report on different
		and Wildlife	4. Interpret the	organisations
		• Biosphere	importance of Red Data	involved in
		Reserve	Book to explain why	conservation of
		• Flora and	keeping a track of	wildlife.
		Fauna	endangered species is	 Activity to locate
		• Endemic	important.	the Wildlife
		Species	5. List some famous	Sanctuaries,
		• Wildlife	biosphere, wildlife	National parks and
		Sanctuary	sanctuaries and national	Biosphere reserves
		National	parks to describe	of one's state on an
		Park	different mechanisms	outline map of
		• Red Data	and measures taken by	India.
		Book	government to protect	• ICT Project : To
		Migration	and conserve forest and	prepare a power
		Recycling	wildlife.	point presentation
		Of Paper	6. Explain recycling and	on the distinct
		•	reforestation to	features of
	AUGUST	Reforestatio	describe ways to reduce	Endemic,

n	deforestation.	Endangered and Extinct species of flora and fauna of one's geographical area. •Enrichment Exercises. • Ncert Exercises. • Worksheets.	
Ch 8 - Cell: strucure and Functions (Rationalize d) • Discovery Of Cell • The Cell • Organisms Show Variety In Cell Number, Shape and Size • Cell Structure and Function • Parts of the Cell • Comparision	1. Classify animals based on their cell number, shape and size in order to describe the unicellular and multicellular animals. 2. List and distinguish between the different parts and functions of a typical cell in order to appreciate the unit structure in an organism. 3. Distinguish between plant and animal cells to explain the functions of cell organelles.	 Activity to prepare a temporary stained mount of an onion peel and to study its structure under a microscope. Activity to prepare a temporary stained mount of a human cheek cells and to study its structure under a microscope. Model making of Plant and Animal cells Or Shapes of human cells. Worksheets. 	

Of Plant and Animal Cells. Ch 9 - Reproduction in Animals • Modes of Reproduction • Sexual Reproduction • Asexual Reproduction	1. Differentiate between asexual and sexual reproduction in order to list two modes of reproduction. 2. Differentiate between sex cells corresponding to parents in order to explain male and female gamete. 3. Differentiate between Internal and External fertilisation in order to describe two modes of fertilisation in animals 4. Classify animals based on their ability to give birth or lay eggs to distinguish between	Ncert Exercises. •Enrichment Exercises. • To Study the Sexual Reproduction in Human beings using Videos and Models • Activity to study asexual reproduction in Hydra (budding) and Amoeba (binary fission) using permanent Slides . • Model making of Human Male and Female	
Asexual	to parents in order to	Models	
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	Viviparous and	Reproductive	
	Oviparous animals . 5. Describe process of	Systems. • Worksheets. •	
	fertilization to explain	Ncert Exercises.	
	Zygote, embryo, and	•Enrichment	
	foetus formation to	Exercises.	
	understand how an		
	individual is formed		
	inside mother's womb.		
	6. Describe the life cycle		

				of frog from eggs to adult frogs in order to explain metamorphosis. 7. Describe the process of reproduction in hydra and amoeba to explain the process of asexual reproduction		
TERM-2						30 + 20 = 50% Of Annual Syllabus
	PT2	SEPTEMBER	REVISION Ch 10 -	Define adolescence	• Activity to	
OCTOBER TO MARCH	Max M: 80 (Weightage 80 m)		Reaching the Age of Adolescence Adolescence and Puberty Changes at Puberty	and adolescent age in order to explain changes at puberty. 2. Enumerate different variations that take place in body at puberty to explain the effect of adolescence on	Compare the average rate of growth in the heights of boys and girls with respect to age and predict the height of a boy/girl at the end of	
		OCTOBER	SecondarySexualCharactersRole OfHormonesin Initiating	changing human body. 3. Explain the effects and functions of hormones in the development of secondary sexual	growth period and to Plot the data on a graph sheet •Group discussion on "Natural requirements	

	•			
	Reproductiv	characteristics to	during	
	e Function	illustrate growth during	Adolescence".	
	•	puberty.	 Art prints or 	
	Reproductiv	4. Describe	collage making on	
	e Phase Of	mensuration, menarche,	Reproductive	
	Life in	and menopause to	Health.	
	Humans	explain the reproductive	• Worksheets. •	
	How is the	-	Ncert Exercises.	
	Sex of the	5. Illustrate the	•Enrichment	
	Baby	procedure for	Exercises.	
	Determined	<u> </u>		
	?	baby to establish that		
	Hormones	•		
	Other than	by chromosome from		
	Sex	male gamete.		
	Hormones	6. Elucidate the need for		
	Role Of	a balanced diet in order		
	Hormones	to explain the		
	in	nutritional needs of		
	Completing	adolescents.		
	the Life	7. Identify the harmful		
	History Of	consequences of taking		
	Insects and	drugs to explain why		
	Frogs	drugs are not a solution		
	•	to confused and		
	Reproductiv	insecure feeling during		
	e Health	adolescence		
	Cricatti	adolescence		
	Ch 11 -			
	Force and			
	Pressure			
	• Force A	1. Classify common	•Activity to	
	Push or a	actions involving motion	demonstrate that	
l	Pull	of objects as push or	frictional force is a	

• Forces are	pull to define the term	contact force.	
due to an	force.	 Activity to 	
Interaction	2. Cite examples where	demonstrate that	
 Exploring 	force is being applied to	Magnetic &	
Force	explain that two objects	electrostatic forces	
• A Force	must inteact for force to	are non-contact	
can Change	come into play.	forces	
the State of	3. Analyse motion of an	 Activity to show 	
Motion	object when force is	that pressure	
• Force can	applied in same and	exerted by water at	
Change the	opposite direction to	the bottom of the	
Shape of an	infer that force in same	container depends	
Object	direction add while	on the height of its	
Contact	forces in opposite	column.	
Forces	directions subtract.	 Activity to show 	
• Non-	4. Illustrate with	that pressure	
Contact	examples from daily life	exerted by water	
Forces	where an action causes	increases with	
Pressure	change in movement or	depth.	
Pressure	shape with and without	 Activity to show 	
Exerted by	contact between two	that liquid pressure	
Liquids and	objects in order to	exerts equal	
Gases	define contact and non-	pressure at the	
Atmospher	contact forces.	same depth	
ic Pressure.	5. Predict the motion	 Activity to show 	
	and changes when force	the presence of	
	is applied to a body to	atmospheric	
	explain that force can	pressure.	
	cause change in the	 Numericals based 	
	state of motion and	on force and	
	shape of objects.	pressure.	
	6. Derive the formula	• Worksheets. •	
	and calculate pressure	Ncert + Enrichment	
	for given force applied	Exercises.	
	on a given area to		

		explain the		
		phenomenon of		
		pressure acting on		
		objects in daily life. 7.		
		Discover the direction of		
		pressure applied by		
		liquids when put in a		
		container to infer that		
		liquids exert pressure		
		on walls of container. 8.		
		Demonstrate and		
		calculate the		
		atmospheric pressure		
		exerted due to air		
		column above a given		
		area to establish that		
		atomospheric pressure		
		is exerted without us		
		realising it.		
	Ch 12 -		 Activity to study 	
	Friction		the force of friction	
	 Force of 	1. Analyse situations	depends upon the	
	Friction	where resistance is felt	nature of the two	
	Factors	while applying force to	surfaces in contact.	
	affecting	move a body to explain	 Activity to show 	
	Friction	friction force. 2.	that rolling friction	
	• Friction: A	Discover the factors that	is less than the	
	Necessary	cause friction when two	sliding friction in	
	Evil	bodies moving relatively	magnitude.	
	 Increasing 	to explain why it is	 Activity to test 	
	and	easier to move an	the effect of mass	
	Reducing	object on a smooth	on friction.	
	Friction	surface compared to	 Model making on 	
	Wheels	rough surface.	Friction Ramp.	
NOVEMBER	Reduce	3. Differentiate between	Enrichment	

Friction • Fluid Friction	static, sliding and rolling friction to formulate strategies to reduce friction. 4. Provide advantages and disadvantages of friction in order to justify friction as necessary evil. 5. Explain why the streamlined body is needed when flying to explain drag caused by air.	Exercises. • Ncert Exercises. • Worksheets.	
Ch 13 -			
Sound • Sound is	1. List examples of body	Activity to show	
Produced by	moving in to and fro	that sound travels	
a Vibrating	motion in order to	through Solids,	
Body	explain vibration.	Liquids, and gases.	
• Sound	2. Cite examples where	Activity to show	
Produced by	sound travels from one	that Sound does	
Humans	point to another in	not travel through	
• Sound	order to establish that	Vacuum.	
Needs a	sound needs a medium	To construct a	
Medium for	to propagate.	Toy phone.	
Propagation	3. List commonly known	Activity to make a	
• We Hear	musical instruments and	Jaltarang which	
Sound	identify the parts that	produces Sound of	
through Our	vibrate to explain that	different	
Ears	vibration produce	frequencies.	
•	sound.	Activity to	
Amplitude,	4. Differentiate between	demonstrate the	

Time Period and Frequency Of a Vibration • Audible and Inaudible Sounds • Noise and Music • Noise Pollution	frequency and amplitude to describe factors responsible for loudness and pitch of the sound. 5. List and identify functions of parts of human body that produces sound to explain the process of sound production in humans. 6. Describe the structure and function of an eardrum to explain how humans hear sound. 7. Distinguish betweenthe ranges of audible and inaudible sounds to explain why certain sounds cannot be heard by humans. 8. List the harmful effects of noise pollution to mitigate it.	functioning of vocal cords. • Worksheets. • Ncert Exercises. •Enrichment Exercises.
Ch 14 - Chemical		
Effects of	1. Distinguish between	Activity to test
Electric	good and poor	whether a given
Current	conductors of electricity	_
	-	liquid is a good
• Do Liquids	to explain that various	conductor or poor
Conduct	materials can conduct	conductor of

		Electricity • Chemical Effects of Electric Current • Electroplati ng	electricity under certain conditions. 2. List chemical effects of electricity to establish that electricity causes chemical reactions. 3. Describe the process of electrolysis and electroplating to explain the application of chemical effects of electricity on metals	electricity. • Activity to study the process of Electrolysis and Electroplating. • Activity to identify the Positive terminal of the battery. • Model making of an Electric Tester (Simple Electric Circuit) and Electrolytic cell. • To make an electric pen • Worksheets. • Ncert Exercises. • Enrichment Exercises.	
PT-3 Max M: 40 (Weightage 5m)	DECEMBER	Ch 15 -			30% of Term 2
		Some Natural Phenomena •Lightning	Analyse if two objects attract or repel each other to establish that	 Project: To make a report on safety measures to be taken during a 	

Charging	similar charge repel	thunderstorm,
by Rubbing	while opposite charge	lightning and
Types of	attract each other.	earthquake.
Charges and	2. Cite examples of	To Experiment
Their	visible sparks to explain	with comb and
Interaction	the phenomenon of	paper to show the
 Transfer 	lightning.	positive and
of Charge	3. Examine the	negative charge.
• The Story	sequence of lightning	Discussion on
of Lightning	occuring in clouds to	Sparks and on
 Lightning 	explain the process of	lightning conductor.
Safety	electric discharge in	Activity to show
•	nature. 4. Predict	that like charges
Earthquakes	how lightning travels	repel each other
	from the clouds to	while the unlike
	ground to describe the	charges attract
	measures that must be	each other.
	taken during lightning.	 Activity to show
	5. Examine the working	the transfer of
	of electroscope to	charges via
	detect if an object is	electroscope.
	charged or not to apply	• To prepare a
	the concept of similar	report on the
	charged objects repel	impact of
	each other.	earthquakes on the
	6. Illustrate with a	earth surface and
	diagram the movement	human life Or
	of earth to explain	Model making of
	phenomenon of	Electroscope or
	earthquake.	Seismograph.
	7. Identify and explain	• Worksheets. •
	Seismic zones around	Ncert + Enrichment
	earth to explain why	Exercises.
	some area are more	
	affected by earthquake	

Ch 16 - Light • What • What Things • Laws of Reflection Reflection • Regular and diagram how images Diffused Reflected Light Can be Reflected Again JANUARY • Multiple Images • Sunlight- What is inside Our Eyes? • Care of • Care of • What • Light 1. Identify and calculate the angles of incidence and reflection of ray of light to illustrate the laws of reflection in real life. • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed by Concave & Concave & Concave & Concave e Activity to study the nature of image formed by Concave e Activity to study the nature of image formed by Concave e Activity to study the nature of image formed by Concave e Activity to study the nature of image formed by Concave e Activity to study the nature of image formed by Concave e Activity to study dispersion of light using a plane mirror inclined on a water surface. • Activity to prove the laws of reflection of light by using plane mirror. • Activity to study dispersion of light by using a plane mirror inclined on a water surface. • Activity to prove the laws of reflection of light by using plane mirror. • Activity to study dispersion of light by using plane mirror • Activity to study dispersion of light by using a plane mirror • Activity to study dispersion of light by using a plane mirror • Activity to study dispersion of light by using a plane mirror • Activity to study dispersion of light by using a plane mirror • Activity to study dispersion of light by using a plane mirror • Activity to study dispersion of light by using a plane mirror • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed by Concave e Activity to study dispersion of light by using a plane mirror • Activity to study the nature of image formed by Concave e Activity to study the nature of image formed by Concave e Activity to study dispersion of light by using a plane mirror • Activity to study the nature of image formed by Concave e Activity			than others.	
Light • What makes Things Things Visible • Laws of Reflection and diagram how images Diffused Reflected Light Can be Reflected Again JANUARY Light • What is inside Our Eyes? • What is inside Our Eyes? • What is inside Our Eyes? • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed by Concave the nature of image formed by Concave & Convex lenses • Activity to study the nature of image formed by Concave & Convex lenses • Activity to study the image formed by Concave & Convex lenses • To Study the image formation in the Eye • Activity to study dispersion of light using a plane mirror inclined on a water surface. • Activity to study the nature of image formed by Concave & Convex lenses • Activity to study the nature of image formed by Concave & Convex lenses • To Study the image formation in the Eye • Activity to study dispersion of light using a plane mirror inclined on a water surface. • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Con				
Light • What makes Things Things Visible • Laws of Reflection • Regular and Biffused Reflection • Reflected Light Can be Reflected Again JANUARY Light • What is inside Our Eyes? Light • What of Makes Things 1. Identify and calculate the angles of incidence and reflection of ray of light to illustrate the laws of reflection in real life. 2. Illustrate with a line diagram how images invert when reflecting from a mirror to see the application of the laws of reflection. 3. Distinguish between reflection from rough and smooth surface to differentiate between diffused and regular reflection. 4. Establish that light can reflect multiple time with a set of mirrors by constructing a • Activity to study the nature of image formed by Concave & Convex lenses • To Study the image formation in the Eye • Activity to study dispersion of light using a plane mirror inclined on a water surface. • Activity to study the nature of image formed in a Plane mirror • Activity to study the nature of image formed by Concave & Convex lenses • To Study the image formation in the Eye • Activity to study dispersion of light using a plane mirror inclined on a water surface. • Activity to study the nature of image formed by Concave & Convex lenses • To Study the image formation in the Eye • Activity to study dispersion of light using a plane mirror inclined on a water surface. • Activity to study the nature of image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image formed by Concave & Convex lenses • To Study the image forme				
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		• Care of	kaleidoscope.	Thaumatrope.

the Eyes • Visually Impaired Persons Can Read and Write • What is the Braille System	5. Describe the various parts of human eye and identify their functions to explain how humans see objects in presence of light. 6. Recommend different measures for protecting eyes when a problem is felt to establish the importance of eye care. 7. Describe the braille system to explain how people with visual impairment manage to read and write.	 Model Making a Kaleidoscope; Observing multiple images formed by mirrors placed at angles to each other. Model Making of a Periscope. Model Making of a Human eye. Worksheets. Ncert Exercises. Enrichment Exercises.
Ch 17 - Stars and Solar System (Rationalize d) • The Moon • The stars • Constellatio ns • The Solar System • Some Other Members of Solar System	 Explain with diagram the different phases of moon to explain that moon rotates around earth. Differentiate between asteriods, comet and meteor to identify the celestial body. Categorize the name of commonly known group of stars to explain that constellations are 	• To explore heavenly bodies: To find about structure, temperature, atmosphere, size and number of moons of each planet present in solar system. • Activity to observe different phases of the

	group of stars with	moon.
	recognisable shape.	Model making of
	4. Outline and illustrate	Solar system;
	the planets of the solar	Observing and
	system in order to	identifying some
	correctly identify them.	prominent planets,
	5. Identify the name of	visible to the naked
	different celestial	eye.
	bodies in the solar	• Visit to a
	system to explain the	Planetarium to
	constituting bodies of a	explore celestial
	solar system.	bodies.
	6. Describe artificial	Working Model
	satellites in order	making of celestial
	correctly classify them	bodies.
	as man-made celestial	Art Prints or
	body.	Model making of
		Constellations.
		ICT Project: To
		prepare a PPT
		presentation on
		Heavenly bodies.
		• Worksheets. •
		Ncert Exercises.
		•Enrichment
		Exercises.
Ch 18 -		
Pollution of		
Air and		
Water	4.	Activity to create
(Rationalize	1. Analyse and describe	awareness about

d) • Air Pollution • How does Air Get Polluted • Case Study-The Taj Mahal • Greenhouse Effect • What can be Done? • Water Pollution • How does Water Get Polluted? • What is Potable Water and How is Water Purified? • What Can be Done?	the problem of air pollution and water pollution to explain why it is a threat to human beings. 2. Explain the effect of greenhouse gases on the planet to explain potential reason for rising temperature of the planet. 3. Elaborate the formation and effects of acid rain to explain the reason for discolouration of the marble of monuments. 4. Enumerate steps that can be taken to clean water for drinking to explain how water can be made safe for drinking. 5. Explain how reducing, reusing and recycling industrial waste helps in reducing water pollution to explore measures to deal with water pollution. 6. Suggest alternate mechanism to lower carbon emission to explain ways to curb air pollution.	harmful effects of air and water pollution and developing need to control them. • Case study and discussion on Air and water pollution. • Construction of waterfilter with simple everyday materials. • Activity to show the impact of acid rain on plants growth. • Visit to nearby water treatment plant OR sewage treatment plant • 5E Project: To delve into the water conservative techniques adapted in locality. • Working model making of "Types of pollution" OR "Waste water treatment plant". • Article writing on "The impact of Green house effect/global warming on
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			7. Cite steps taken to prevent water pollution in major rivers to explain measures to deal with water pollution.	Earth". • Worksheets. • Ncert Exercises. •Enrichment Exercises.	
February		REVISION			
ANNUAL EXAMINATION Max M: 80 (Weightage 80 m)					Ch:2. Microorganisms: Friend and Foe Ch:4. Materials: Metals and Non-Metals Ch:9. Reproduction in Animals + Entire syllabus of Term 2
	MARCH				

*Note-Rationalized chapters be taught through activities. Not to be tested.