

BHARTIYA VIDYA MANDIR SENIOR SECONDARY SCHOOL					
SECTOR-39, CHANDIGARH ROAD, LUDHIANA					
SYLLABUS OF CLASS VII					
BOOK: CURIOSITY		SUBJECT : SCIENCE		SESSION-2026-27	
MONTH	UNIT/CHAPTER/TOPIC	LEARNING OBJECTIVES	RESOURCES/E-RESOURCES		LEARNING OUTCOMES/ SKILLS LEARNT BY STUDENTS
APRIL	CH-1 THE EVER EVOLVING WORLD OF SCIENCE	LEARNERS WILL BE ABLE TO: 1.Understand the meaning and nature of science. 2. Recognize how scientific knowledge changes over time. 3. Learn about scientific methods and experimentation. 4. Identify contributions of scientists to society. 5. Develop curiosity and scientific thinking.	ACTIVITY Scientist Role-play Presentation RESOURCES / STRATEGIES Brainstorming Questioning Discussion Chart-making Assignment	https://www.youtube.com/live/rCH4ND5cBac?si=hv3Qom8CXuUjBtUm	Students understand the nature of science as a dynamic and evolving field. They learn how scientific discoveries develop through observation, experimentation, and innovation, and how science influences daily life and society. SKILLS DEVELOPED Curiosity ,Inquiry, Observation Creativity, Critical-thinking
	CH-2 EXPLORING SUBSTANCES - ACIDIC , BASIC AND NEUTRAL	LEARNERS WILL BE ABLE TO: 1.Differentiate between acids, bases, and neutral substances. 2. Identify common indicators and their color changes. 3. Test substances using natural and synthetic indicators. 4. Understand neutralization reactions. 5. Relate acids and bases to daily life.	ACTIVITY Litmus Paper Testing of Household Substances RESOURCES / STRATEGIES Experimentation Observation-sheet Lab-activity Worksheet Inquiry-method	https://www.youtube.com/live/XdEZHqWq5a?si=59A-w7BjybdM6iG6	Students learn to identify acids, bases, and neutral substances using indicators. They understand their properties, everyday uses, and safety precautions while handling chemicals. SKILLS DEVELOPED Testing, Classification, Experimentation, Analysis, Inference
	CH-3 ELECTRICITY- CIRCUITS AND THEIR COMPONENTS	LEARNERS WILL BE ABLE TO: 1.Identify components of an electric circuit. 2. Draw and interpret simple circuit diagrams. 3. Distinguish between conductors and insulators. 4. Understand open and closed circuits. 5. Practice safe use of electricity.	ACTIVITY Simple Electric Circuit Making RESOURCES / STRATEGIES Practical-demonstration Questioning Hands-on-learning Diagram-practice Assignment	https://www.youtube.com/live/59wDqK2CK?si=piYD_OYtUbuqYKc	Students understand basic electric circuits, components like cells, wires, and switches, and how electricity flows. They develop skills in constructing simple circuits safely. SKILLS DEVELOPED Circuit-building, Observation, Application, Logical-thinking
MAY	CH-4 THE WORLD OF METALS AND NON METALS	LEARNERS WILL BE ABLE TO: 1.Differentiate between metals and non-metals. 2. List physical and chemical properties of metals. 3. Understand uses of metals and non-metals. 4. Learn about corrosion and prevention. 5. Identify examples from daily life.	ACTIVITY Properties Testing (Lustre, Hardness, Conductivity – teacher guided) RESOURCES / STRATEGIES Demonstration Observation Comparison-chart Discussion	https://youtu.be/rTTzPo4KRA7?si=VEIDgaKty-RbELk4	Students differentiate between metals and non-metals based on their physical and chemical properties and understand their uses in daily life. SKILLS DEVELOPED Identification, Comparison, Classification ,Experimentation Reasoning
	CH-6 ADOLESCENCE: A STAGE OF GROWTH AND CHANGE	LEARNERS WILL BE ABLE TO: 1.Define adolescence and puberty. 2. Identify physical and emotional changes. 3. Understand hormonal changes. 4. Promote personal hygiene and health. 5. Develop positive attitude towards growth.	ACTIVITY Growth and Development Chart Preparation RESOURCES / STRATEGIES Group-discussion Counseling-talk Brainstorming Questioning	https://www.youtube.com/live/d_mhmH1IeXE?si=nQAJgG9rwuhdl5E	Students understand physical, emotional, and hormonal changes during adolescence. They learn about personal hygiene, balanced nutrition, and healthy habits. SKILLS DEVELOPED Awareness, Understanding, Sensitivity, Self-management, Responsibility
JUNE	SUMMER VACATIONS				
	CH-7 HEAT TRANSFER IN NATURE	LEARNERS WILL BE ABLE TO: 1. Explain modes of heat transfer – conduction, convection, radiation. 2. Differentiate between conductors and insulators of heat. 3. Understand sea breeze and land breeze. 4. Identify examples of heat transfer in daily life. 5. Apply knowledge to practical situations	ACTIVITY Conduction Demonstration with Metal Spoon RESOURCES / STRATEGIES Demonstration Experimentation Observation Worksheet Discussion	https://www.youtube.com/live/zZ7RYK5dv?si=SgdWl02EqvldVQ	Students explain how heat transfers through conduction, convection, and radiation. They relate these processes to natural phenomena like land and sea breeze. SKILLS DEVELOPED Observation, Experimentation, Analysis, Application, Interpretation

JULY	CH-8 MEASUREMENT OF TIME AND MOTION	LEARNERS WILL BE ABLE TO : 1. Define motion and types of motion. 2. Measure distance and time accurately. 3. Calculate speed using formula. 4. Interpret simple graphs of motion. 5. Relate motion concepts to daily activities.	ACTIVITY Speed Calculation Activity (Walking Distance in School Ground) RESOURCES / STRATEGIES Measurement-tools Calculation-practice Graph-drawing Questioning Assignment	https://www.youtube.com/live/hCyYbYQsOwg?si=C8MTVU5eyQ0GPD8	Students understand concepts of motion, speed, and time measurement. They learn to measure and calculate speed and interpret simple motion data. SKILLS DEVELOPED Measurement, Calculation, Graphing, Accuracy, Interpretation
AUGUST	CH-9 LIFE PROCESSES IN ANIMALS	LEARNERS WILL BE ABLE TO: 1. Identify basic life processes in animals. 2. Understand digestion, respiration, and circulation. 3. Learn about excretion and control systems. 4. Differentiate between systems in simple and complex animals. 5. Appreciate coordination in the body.	ACTIVITY Breathing Rate Measurement Before and After Exercise RESOURCES / STRATEGIES Observation Recording Discussion Questioning	https://www.youtube.com/live/8L8hdDQurA?si=tUSeXhRuEX007k8	Students understand major life processes such as digestion, respiration, and circulation in animals, especially humans. They learn about the structure and function of body systems. SKILLS DEVELOPED Understanding, Correlation, Identification, Analysis, Awareness
SEPTEMBER	REVISION	LEARNERS WILL BE ABLE TO: Revise all the concepts in a proper manner and clear their doubts, for Term 1 Examination.	Interaction and discussion method in the class		SKILLS DEVELOPED Skills of inquiry and learning
OCTOBER	CH-5 CHANGES AROUND US- PHYSICAL AND CHEMICAL	LEARNERS WILL BE ABLE TO: 1. Distinguish between physical and chemical changes. 2. Identify signs of chemical reactions. 3. Observe changes in everyday materials. 4. Understand reversible and irreversible changes. 5. Apply concepts to real-life situations.	ACTIVITY Rusting Observation Activity RESOURCES / STRATEGIES Experimentation Brainstorming Recording Questioning	https://www.youtube.com/live/tUJW-ww1kNA_#?si=28ysW0dVKYQWAGC-	Students distinguish between physical and chemical changes and recognize examples from daily life. They understand reversibility and the importance of changes in natural processes. SKILLS DEVELOPED Observation, Differentiation, Analysis Experimentation, Conclusion
	CH-10 LIFE PROCESSES IN PLANTS	LEARNERS WILL BE ABLE TO: 1. Explain photosynthesis and its importance. 2. Understand transpiration and respiration in plants. 3. Identify transport of water and food in plants. 4. Recognize role of chlorophyll and sunlight. 5. Connect plant processes to ecosystem balance.	ACTIVITY Starch Test in Leaves RESOURCES / STRATEGIES Demonstration Diagram-labeling Observation Discussion	https://youtu.be/uD6aHomv5Hc?si=GeEh8bnUj2IqN56v	Students learn about photosynthesis, respiration, and transport in plants. They understand how plants prepare food and maintain life processes SKILLS DEVELOPED Observation, Investigation, Diagramming, Analysis, Inference
NOVEMBER	CH-11 LIGHT : SHADOWS AND REFLECTION	LEARNERS WILL BE ABLE TO: 1. Explain formation of shadows. 2. Identify types of mirrors. 3. Understand reflection of light. 4. Draw ray diagrams for simple reflection. 5. Apply concepts in daily life (periscopes, mirrors).	ACTIVITY Mirror Reflection Activity RESOURCES / STRATEGIES Practical-demonstration Ray-diagram Questioning Brainstorming	https://www.youtube.com/live/iS5hFc7J-Dg?si=nRh7rkdX9FLF_17g	Students understand how light travels, forms shadows, and reflects from surfaces. They explore mirrors and the basic laws of reflection. SKILLS DEVELOPED Observation, Ray-tracing, Prediction, Analysis, Interpretation
	CH-12 EARTH , MOON AND THE SUN	LEARNERS WILL BE ABLE TO: 1. Describe movements of Earth (rotation and revolution). 2. Explain day and night formation. 3. Understand phases of the Moon. 4. Identify eclipses and their causes. 5. Appreciate relationship between Earth, Moon, and Sun	ACTIVITY Phases of Moon Model Making RESOURCES / STRATEGIES Model-making Visual-aids Discussion Questioning Assignment	https://www.youtube.com/live/ADNEXOBIDb?si=f36sVIsfrnCnmX	Students understand the relationship between Earth, Moon, and Sun. They learn about phases of the Moon, eclipses, and basic astronomical concepts. SKILLS DEVELOPED Observation, Visualization, Correlation, Reasoning
DECEMBER - FEBRUARY	REVISION	LEARNERS WILL BE ABLE TO: Revise all the concepts in a proper manner and clarify their doubts and prepare themselves for Final Term	Interaction and discussion method in the class		SKILLS DEVELOPED Skills of inquiry and learning