

**HANSRAJ MODEL SCHOOL
PUNJABI BAGH, NEW DELHI
CURRICULUM PLAN
SESSION: 2024-2025
CLASS: V
SUBJECT: SCIENCE**

MONTH	TOPIC / SUB-TOPICS	LEARNING INTENTIONS (LEARNING OUTCOMES + COMPETENCIES)	ACTIVITIES	ASSIGNMENTS
APRIL	MY BODY (SDG 5,10) BREATHING SYSTEM SKELETAL SYSTEM JOINTS	The learners explore the importance of various exercises. appraise the students about the terms like organ and system. analyse the importance and functions of various organs involved in breathing system and skeletal system. construct the breathing system using waste material inculcate awareness regarding the importance of joints. recognize different types of joints, present in our body. distinguish between various joints and compare them according to their function and location.	Model of Breathing system using straw, balloon and waste bottle Robotic Hand- using straw Making of movable joints using waste material	A-1 DEFINITIONS Organ, system, breathing, vertebrae, floating ribs, joint, optic nerve, ligament, cartilage A-2 QD (2,3) + QE(1) A-3 Web-chart on types of joints. A-4 QE (2,3,4) A-5 QD (5) + QE (6) A-6 Tabular chart on sense organs of animals with their functions A-7 QABC in bk
APRIL				

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	SENSE ORGANS	design the various joints according to their movement. compare and contrast sense organs in humans and various animals.		A-8 VBQ IN BK
MAY	PLANTS SDG 13,15 Photosynthesis Reproduction in plants	understand the importance of seed. observe the structure of seed compare and differentiate between monocot and dicot seed demonstrate the stages of germination of seed through experimentation. enlist the conditions required for germination of seed illustrate the relationship between light & Photosynthesis. deduce the adaptations in carnivorous plants. interpret the role of chlorophyll in plants.	Specimen observation -Structure of seed using soaked bean seed Germination of Seeds Chlorophyll painting using leaves.	A-9 DEFINITIONS Photosynthesis, stomata, chlorophyll, insectivorous plants, vegetative reproduction, seed germination, seedling, seed dispersal A-10 QD (2,4) A-11 QE (1,2) A-12 WEB CHART on types of reproduction in plants +QE(3)

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MAY	Seed dispersal	<p>To identify and classify the various parts of the plant used for reproduction</p> <p>classify the ways of seed dispersal into natural and human made ways.</p> <p>deduce the importance of agricultural practices in seed dispersal.</p> <p>categorize plants that disperse their seeds through wind ,water, insects, animals and bursting</p>	Game of seed dispersal	<p>A-13 WORKSHEET</p> <p>A-14 QABC IN BK</p> <p>A-15 VBQ IN BK</p>
JULY	<p>L- FORESTS (SDG 12,13,15)</p> <p>Advantages of Forests</p> <p>Forest Products</p>	<p>define Forest and underline its importance</p> <p>state the advantages of a forest.</p> <p>sensitize and describe various forest products and state their uses.</p>	Daily Pulse : Your News, Your Voice- Design your own newspaper on topic importance of forest conservation	<p>Research work</p> <p>Healing herbs : Nature's Pharmacy</p> <p>National parks and wildlife</p>

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	<p>Deforestation</p> <p>How to protect Forests</p>	<p>justify the importance of Forest conservation Act.</p> <p>explain deforestation and its harmful effects</p> <p>suggest steps to take good care of forests.</p> <p>differentiate between national parks and wild life sanctuaries.</p>	<p>Poster Making on Save Forest</p> <p>Presentation on deforestation and its harmful effects</p>	<p>sanctuaries near and around Delhi</p>
JULY	<p>ANIMALS OUR FRIENDS (SDG 12,15)</p> <p>Usefulness of animals</p> <p>Wildlife</p> <p>Dangers of wildlife trade</p> <p>Protection of wildlife</p> <p>Food chain and food web</p>	<p>state the usefulness of a few animals seen in our day-to-day life.</p> <p>distinguish between extinct animals and endangered animals.</p> <p>enlist various parts of animals used in illegal trading</p> <p>express the importance of wildlife (protection) Act.</p>	<p>FOOD CHAIN/ FOOD WEB (USING EMPTY CUPS)</p> <p>Poster making on wildlife</p>	<p>A-16 DEFINITIONS</p> <p>Wildlife, draught animals, species, food chain, food web</p> <p>A-17 QD(3)+ QE(1)+EQ</p> <p>Why do some wild animals become man eaters?</p> <p>A-18 QE (2,3,4)</p> <p>A-19 QE(5)-TABULAR CHART + EQ</p> <p>A-20 QABC IN BK</p>

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		<p>compare food chain and food web</p> <p>suggest steps to take good care of animals.</p>		A-21 VBQ IN BK
AUGUST	<p>FOOD AND HEALTH (SDG 2,3)</p> <p>Healthy eating pyramid</p> <p>Health</p> <p>Diseases</p>	<p>understand and analyse the importance of different nutrients and their functions.</p> <p>compare and contrast between good eating habits over harmful effects of consuming junk food.</p> <p>choose the healthy way of living disease free.</p> <p>differentiate between communicable and non-communicable diseases.</p> <p>explore the various factors responsible for communication of diseases.</p>	<p>ROLE PLAY on Deficiency Diseases.</p> <p>NUKKAD NATAK</p> <p>Communicable diseases</p>	<p>A-22 DEFINITIONS- Nutrients, health, diseases, communicable diseases, non-communicable diseases, deficiency diseases, malnutrition, haemoglobin, balanced diet.</p> <p>A-23 QD (2,4,5)</p> <p>A-24 QE (2,3,5)</p> <p>A-25 EQ1-Write the symptoms of Protein-Carbohydrate deficiency disease</p> <p>EQ2- Web chart on ways by which communicable diseases spread</p> <p>A-26 QABC IN BK</p>

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		observe the preventive measures to keep oneself healthy		A-27 VBQ IN BK
AUGUST	IMPORTANCE OF WATER (SDG 14,15,16) Importance of water for animals and plants ground water water supply	the importance of water for plants, humans and animals. inculcate awareness regarding ground water and ways to obtain them. acquire the knowledge of supply of water to the cities	ACTIVITY PROJECT – Collect information on STEPWELLS in and around Delhi. Collate this information and present artistically on A-4 size sheets	A-28 DEFINITIONS Aquatic plants, aquatic animals, amphibious animals, ground water, step-well. A-29 QE (1,2,3,4,6) + EQ- How does water help in absorption of nutrients in plants? A-30 QABC IN BK A-31 VBQ IN BK
SEPTEMBER	SPOILAGE AND WASTAGE OF FOOD AND FOOD PRESERVATION (SDG 2,3)	understand the importance of food outline ways to preserve food.	PROJECT - Explore the Indian traditional ways of preserving food	A-1 DEFINITIONS Enzymes, food preservation, pasteurization, micro-organisms. A-2 QD (1,2,4,5)

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	Spoilage of food Causes of spoilage of food Prevention of spoilage of food Importance of food preservation	explore the causes of food spoilage analyse the need of avoiding the wastage of food. justify the importance of food preservation	ACTIVITY – JAGO GRAHAK JAGO	A-3 QE (1,2,3,5) A-4 Web chart on Methods of Preservation A-5 QABC IN BK A-6 VBQ IN BK
OCTOBER	PROPERTIES OF WATER (SDG 14,15,16)	explore and infer the states of matter and their inter-conversion. demonstrate the importance of water-cycle in nature. identify soluble & insoluble, floating & sinking materials.	<ul style="list-style-type: none"> • Demonstration of soluble and insoluble substances through recipe of Nimbu Paani. • Floating and sinking using commonly used objects 	AQUA MAGIC Experiments using water

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NOVEMBER	FUELS TYPES AND USES OF FUELS FOSSIL FUELS RENEWABLE AND NON RENEWABLE ALTERNATIVES TO FOSSIL FUELS	<p>understand the uses of fuels in living & non-living things.</p> <p>create awareness regarding non-renewable renewable sources of energy.</p> <p>develop the habit of using alternative sources of energy</p>	DEBATE- Electric Vehicles v/s Fuel run vehicles. Solar updraft tower/Air propelled car	A-7 QD (1,3,4,6) A-8 QE (1,5), EQ-Difference between Renewable and Non-Renewable sources of energy. A-9 QABC IN BK A-10 VBQ IN BK
NOVEMBER-DECEMBER	AIR (SDG 13) Composition of air Importance of air Balance in nature	<p>understand the composition of air</p> <p>explore the percentage of various gases present in air</p> <p>explain the purpose of presence of maximum percentage of nitrogen in air</p> <p>analyse the importance of air for animals and plants</p> <p>Perform the activities to understand the properties of air</p>	 Dandiya dancing girl Discussion on SMOG and Pollutants of air	A-11 QD (2,3,4,6) + QE (2) A-12 QE (3,4,6,7) A-13 QABC IN BK

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	<p>Role of nitrogen</p> <p>Air pollution</p>	<p>Relate how the balance of gases in nature is maintained</p> <p>Examine the factors responsible for depletion of ozone layer in atmosphere</p> <p>Identify the causes of air pollution</p> <p>Explain the effects of air pollution</p> <p>Formulate the steps to reduce air pollution</p>		A-14 VBQ IN BK
DECEMBER	<p>L – OUR SOLAR SYSTEM (SDG 13)</p> <p>The Sun</p> <p>Planets</p> <p>Sattelites</p>	<p>comprehend the information about the components of solar system</p> <p>relate importance and uses of sun to our day to day life.</p> <p>identify various planets on the basis of their features.</p> <p>differentiate between natural and artificial satellites.</p>	PROJECT – India in space (ISRO) (RESEARCH EXTENSION)	<p>A-15 DEFINITIONS Solar energy, solar system, satellite, artificial satellite, phases of moon.</p> <p>A-16 QE (1,2,3)</p> <p>A-17 QE (4,5) + EQ-Difference between Rotation and Revolution.</p> <p>A-18 QABC IN BK</p>

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		Compare the two movements of Earth ,Rotation & Revolution & its importance.		A-19 VBQ IN BK
JANUARY	L – OBSERVING THE SKY (SDG 13) Day time sky Night time sky Stars Constellations	understand the difference between planets and a star. Locate the pole star in different constellation. enable the child to identify the different types of constellations in the sky.	Night-View Companion – Creating a Constellation Projector-	A-20 QD (1,2,3,4) A-21 QE (1,2,3,4,5) A-22 QABC IN BK A-23 VBQ IN BK