

BUDHA DAL PUBLIC SCHOOL, PATIALA

CLASS 6 Science Annual Pedagogical Plan (2023-24)

TOPIC	LEARNING OUTCOMES	INNOVATIVE / ART INTEGRATION / EXPERIENTIAL LEARNING / INTER DISCIPLINARY LINKAGES AND INFUSION OF LIFE SKILLS
Sources of Food	<ul style="list-style-type: none"> •Students will understand the importance of food as basic necessity. •Learners will appreciate the resources that feed the world and sensitised to take care of the available resources of food. •Students will understand that balanced diet is necessary for good health. •They will understand the edible parts in various plants. •Identify the animals around on the basis of food they eat. 	<ul style="list-style-type: none"> •Collection of recipes from different states of India and pasting their pictures on political map of India. •Make a list of animals/paste pictures of animals found in the surroundings and identify them on herbivore, carnivore omnivores and parasites.
Components of Food	<ul style="list-style-type: none"> •The students will be knowing various types of nutrients present in food and their importance in the body. •They will be understanding the importance of balanced diet. •Students will analyse the diseases associated with deficiency of nutrients in the diet. •They will be able to handle the chemicals and apparatus precisely during testing. 	<ul style="list-style-type: none"> • The students will identify different components of food in different food items by testing with chemicals. •The students will be enacting as different nutrients present in food items and present role play in a group. •The students can compose poems/songs highlighting the necessity of balanced diet •They will record the food items eaten for breakfast, lunch and dinner daily and analyse whether they are taking a balanced diet.
FIBRE TO FABRIC	<ul style="list-style-type: none"> •Identifying the various types of fabrics available. •Understanding the difference between fibre , yarn and fabric. •Identifying various types of plant fibres and animal fibres. •Understand the process of spinning, weaving and knitting. 	<ul style="list-style-type: none"> •The students will collect samples of various fibres like cotton, jute, wool and silica. •They will be weaving a piece of schematic fabric from paper strips. •Enabling students to understand different steps to make a fabric with the help of pictures and videos.

<p style="text-align: center;">SORTING MATERIALS INTO GROUPS</p>	<ul style="list-style-type: none"> •Enabling students to classify different types of objects depending upon the type of materials they are made from. •Enabling students to classify materials according to their properties. 	<ul style="list-style-type: none"> •Sorting buttons, pencils of different sizes/colours , balls of different sizes/colours. •Students will be made to perform activities to identify substances as soluble/insoluble/miscible/immiscible in water. •Students will group objects around them on the basis of transparency.
<p style="text-align: center;">SEPARATION OF SUBSTANCES</p>	<ul style="list-style-type: none"> •Enable the students to know the need and purpose of methods and separation of substances. •Enable the students to understand the particles of different sizes •Make them aware of methods of separation that they come across in everyday life such as handpicking, sieving etc. •Apply methods for the separation of solids from liquids such as sedimentation, decantation and filtration. Also liquids from liquids like kerosene in water. •Identify conditions where more than one method of separation needs to be applied. •Experiment that water dissolves different substances in different amount. •Enable the students to apply the studied knowledge in daily life situations. 	<ul style="list-style-type: none"> •The learners will be able to reason the use of different techniques of separation in everyday life like of separation of cream from milk, tea leaves from strainer, stones from rice and pulses etc. •The students will suggest and select the suitable separation method for any mixture. •They will comprehend the large scale application of technique such as filtration for purifying water and cottage cheese preparation. •Illustrate the use of alum (phitkari) in cleaning muddy water. •The students will develop the skills of experimentation, observation and understanding through various activities of separation methods. •Learn the value of extracting and recovering useful things from the non-useful mixture. •The students will perform activity to separate sand, salt and oil from the mixture.
<p style="text-align: center;">CHANGES AROUND US</p>	<ul style="list-style-type: none"> •Enable the students to recognise the various changes around us. •Understanding the various changes occurring in surroundings and classify them as reversible and irreversible. 	<ul style="list-style-type: none"> •List the changes in daily life and identify the changes that can be reversed and changes that cannot be reversed. •Activity of burning a candle and observing the change.

		<ul style="list-style-type: none"> •Various activities to demonstrate reversible and irreversible changes like folding and unfolding of coloured paper thus enhancing their creative skills.
THE LIVING AND THE NON LIVING	<ul style="list-style-type: none"> •Students will be able to list, describe and analyse the characteristics of living things. •They will be able to explain that viruses have characteristics of both living and non living things. 	<ul style="list-style-type: none"> •Students will observe cells of an onion peel under microscope. •They can record average lifespan of some organisms on a chart. •The students will observe the characteristics of response to stimuli with the help of Mimosa plant (touch-me-not).
GETTING TO KNOW PLANTS	<ul style="list-style-type: none"> •Identifying the various categories of plants. •Identifying and differentiating plant parts. •Identifying different types of venation in leaves. •Identifying different types of root systems found in plants. •Correlation of venation with the root system. •Identifying the reproductive part of plant and studying it's various parts. •Students will be able to define creepers, climbers, photosynthesis and transpiration. 	<ul style="list-style-type: none"> •Visit a garden and identify the plants as herbs,shrubs and tree. •Students will collect specimen of different types of venation in leaves and paste the same after drying on scrap files/loose sheets •While studying different parts of plants the students will imbibe the value of conservation of Nature.

TOPIC	EXPECTED LEARNING OUTCOMES	INNOVATIVE/ART INTEGRATION/EXPERIENTIAL LEARNING/INTER-DISCIPLINARY & INFUSION OF LIFE SKILLS
Body Movements	Students will be able to: <ul style="list-style-type: none"> ● define movement, locomotion and skeleton. ● understand the types of joints. ● relate the concept of body movement in different categories of animals ● infuse integrated value of animal body and body movements ● develop skills of Knowledge, Observation, Analysis, synthesis. 	<ul style="list-style-type: none"> ● Demonstration of the human skeleton along with various kind of joints and bones in the laboratory.
The Living Organisms and their Surroundings	Students will be able to: <ul style="list-style-type: none"> ● enhance their knowledge regarding environment. ● give the concept of food chain, habitat and adaptations of different animals. ● compare the adaptations of different animals. ● develop skills of Awareness, Analytical Skills, Problem Solving, and Observational Skills. ● imbibe aesthetic values. 	<ul style="list-style-type: none"> ● Role play on different type of habitats[experiential learning] ● Depiction of different types of adaptations with the help of pictures in the notebook.[Art integration]
Motion and Measurement of Distances	Students will be able to: <ul style="list-style-type: none"> ● analyze different kinds of motions in surrounding. ● estimate small distances such as length of pencil. ● To follow proper 	<ul style="list-style-type: none"> ● Demonstration of different types of motion ● Finding the length of a curved line using a divider and a thread ● Measurement of the length of the table

	<p>precautions while taking reading of scale.</p> <ul style="list-style-type: none"> ● apply the concepts of measurement in everyday life 	<p>with their handspan and comparison of the result with their classmates.</p>
<p>Light, Shadows and Reflections</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● understand the occurrence of solar and lunar eclipses ● apply the concept of pinhole camera. ● apply the concept of rectilinear propagation of light ● inculcate reasoning ability 	<ul style="list-style-type: none"> ● To show that light travels in straight line. ● To show that a source of light is needed for the formation of shadow. ● To show that for the formation of shadow, there must be an opaque screen to receive the shadow of an opaque object. ● To show that the size of shadow depends on the distance between the source of light and opaque object. ● To show the reflection of light by a plane mirror. ● Students will make a pinhole camera and explain its working.
<p>Electricity and Circuits</p>	<p>The students will be able to:</p> <ul style="list-style-type: none"> ● Learn the uses and purposes of electricity. ● understand the structure of an electric cell, electric bulb. ● assemble an electric circuit with an electric cell, bulb, connecting wires and switch. ● learn precautions and safety measures to be followed while handling electricity. ● imbibe the value of safety, precaution and careful handling of electric 	<ul style="list-style-type: none"> ● To construct a simple electric circuit. ● To test whether a material conducts electricity or not.

	<p>equipments</p> <ul style="list-style-type: none"> ● understood how devices like alarm clocks, wrist watches, and cameras work without electricity that is by using chemical cell. ● understand the importance of switch in a circuit. 	
Magnetism	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● synthesize the knowledge of making a temporary magnet. ● know the properties of magnet. ● develop the skills of Awareness, Analytical Skills, Problem Solving, Observational Skills, Critical Thinking, and Creativity. 	<ul style="list-style-type: none"> ● To show that magnetic poles have the maximum magnetic power. ● To show the directive property of a magnet. ● To study the nature of force between like and unlike magnetic poles. ● To show deflection of magnetic compass using a magnet.
Water	<p>The students will be able to:</p> <ul style="list-style-type: none"> ● know the properties, sources and usage of water. ● understand role of transpiration in water cycle and cloud formation. ● reason for phenomenon like accumulation of dew drops on the leaves of grass or appearance of fog near ground on winter mornings. ● estimate the amount of water used by his family in a day. ● know how water is recharged under the ground. ● understand the technique of rain 	<ul style="list-style-type: none"> ● To show that heat is required to evaporate water. ● To show condensation of water vapour on cooling.

	water harvesting to conserve water for future use.	
Air Around us	<p>The students will be able to:</p> <ul style="list-style-type: none"> ● apply test for the presence of oxygen to support burning. ● know the importance of balance of gases for survival. ● that most of the activities on the earth are possible due to the presence of air. ● Understand that why during an incident of fire one is advised to wrap a woolen blanket over a burning object. ● reason for the rotation of firki and the weather cock. 	<ul style="list-style-type: none"> ● To show that air occupies space. ● To show the presence of oxygen and nitrogen air. ● To show that air contains carbon dioxide, dust particles. ● To show the presence of air in water and soil.
Garbage In, Garbage Out	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● define and describe biodegradable and non-biodegradable wastes. ● recycle the paper. ● apply 3 R's of waste management. ● enumerate benefits of waste management ● develop the skills of Awareness, Analytical Skills, Problem Solving, Observational Skills, Critical Thinking, and Creativity. 	<ul style="list-style-type: none"> ● To make recycled paper at home. ● To make compost in the school's garden.