INFANT JESUS CONVENT SCHOOL
ANNUAL PLAN (2023-24)
SCIENCE
CLASS: VI

MONTH/NO OF DAYS	TOPIC: SUB TOPIC	OBJECTIVES	AIDS/ACTIVITIES	MULTIPLE INTELLIGENCE SKILLS	LEARNING OUTCOME
APRIL No of Days: 17	**CH-1 FOOD: WHERE DOES IT COME FROM?** • Food Variety • Food Materials and Sources • Plant Parts And Animal Products As food • Plant parts as food • What do Animals Eat? **CH-2: COMPONENTS OF FOOD** • Carbohydrate • Protein	Students will be able to explain • The importance of food • Ingredients of different food • Variety of food • Sources of food • Edible part of food • Classify animals on the basis of their food habit • Different nutrients (carbohydrate protein fat vitamins minerals fibres and water)	**KNOWLEDGE:** • To identify the ingredients used to make a dish. • To classify the food items as plant and animal products • To evaluate the importance of different nutrients in food **SKILLS:** • Reasoning Skills • Writing Skills • Critical Thinking **APPLICATION:** • Tabulate the food items eaten in your lunch and write down the ingredients used to make them • Prepare a diet chart to provide balance diet to a twelve year old child.	• Logical • Interpersonal • Intrapersonal	Students will be able to: • Observe the variety in our food • Find the sources of food • Explain the process of sprouting • Classify the animals as herbivores, omnivores and carnivores identify the components found in the food items • understand the importance of different

	• Fat • Vitamin and minerals • Roughage • Water • Test for various components	• Test of nutrients (starch protein and fat)	• Sprouting of moong dal and prepare a report on its nutritional value. **UNDERSTANDING:** • To evaluate the food items which are obtained from the plants and animals • To explain the process of sprouting. • To understand about diet and nutrition.		nutrients in our food • Understand steps involved to test the different nutrients
MAY No of Days: 12	**CH-2: COMPONENTS OF FOOD** • Balanced diet • Deficiency diseases **CH-4: SORTING MATERIALS INTO GROUPS** • Basis of grouping •Properties of material • Need of grouping	Students will be able to: • The meaning of balanced diet • Different deficiency diseases. • Understand the meaning of matter, object, material and classification • explain basis of grouping of materials • Differentiate properties of material (appearance,	**KNOWLEDGE:** • Knowledge about deficiency diseases and requirement for various nutrients for a healthy body. • Identify the given materials and group them according to their properties **SKILLS:** • Reasoning Skills • Observational skills • Critical Thinking **APPLICATION:** • To test the food usually eaten by cattle or a pet to find out which nutrients	• Creativity (while doing the activities) • Logical • Scientific skills	Students will be able to: • Explain the meaning of balanced diet and its important in our daily life •To evaluate the material and grouped them according to their properties. • To differentiate between transparent, opaque and translucent.

		hardness/softness, solubility, flotation and transparency) • explain the Importance of grouping	are present in animal food and compare results obtained from the whole class to conclude about balanced diet requirements for different animals. • Collect samples of vinegar, lemon juice, mustard oil or coconut oil, kerosene or any other liquid. Take a glass tumbler. Fill it up to half with water. Add a few spoonful of one liquid to this and stir it well. Let it stand for five minutes. Observe whether the liquid mixes with water. Repeat the same with other liquids, as many different liquids as are available to you. Write your observations in Tabular form **UNDERSTANDING:** • To evaluate the harmful effects of excess intake of fats for the body. • To elaborate the need of classification		To elaborate the need of classification.

			by classifying the given objects on the basis of various properties like Appearance, hardness/softness and transparency.		
	REVISION: PT-1				
CONDUCTION OF PT-1 ASSESSMENT (Third Week Of May)					
JULY No of Days: 23	**CH-5: SEPARATION OF SUBSTANCES** • Hand picking • Threshing • Winnowing • Sieving • Sedimentation • Decantation • Filtration • Evaporation • Condensation	Students will be able to: Understand the term element, compound, mixture and pure substance • Explain need of separation • Apply different methods of separation (Hand Picking, Threshing, Winnowing, Sieving, Sedimentation, Decantation, Filtration, Evaporation, Condensation, Churning, Sublimation, Magnetic Separation) • Use of more than one method for separation	**KNOWLEDGE:** • To prepare saturated solution of common salt. • Enclose a leafy branch of the plant in a polythene bag and tie up its mouth. Tie up the mouth of the empty polythene bag and keep it also in the sun. Observe the result. **SKILLS:** • Observational Skills • Analytical Skills • Critical Thinking **APPLICATION:** • To hand pick different items from a given mixture by using various methods of separation. • Find a plant in your house or in your	• Creativity (while doing the activities) • Logical • Scientific skills • Exploring. •	Students will be able to: Explore materials on the basis of physical properties (soft, hard, transparency, appearance, soluble) • Identify materials by doing activities (dissolving or immersing in water) • Differentiate materials on the basis of physical properties. • Apply learning of scientific

	CH7: GETTING TO KNOW PLANTS • Types of plants • Parts of plants: Root, Stem, Leaves & Flower • Parts of a flower	Identify the herbs, shrubs and trees • Identify the different parts of plant and their functions • Types of venation • Identify the parts of flower	neighborhood, which has a long but a weak stem? Write its name. In which category would you classify it? •Leaf printing and to label the parts of leaf. •Make a table based on the observations of the whole class. Add observations to this table, from a field trip to a locality where there are plants with flowers **UNDERSTANDING:** • Activity to show the difference between evaporation and condensation. • **BECOME A LEAF EXPERT** Do this activity with a number of leaves over a period of a few weeks. For every leaf that you wish to study, pluck it and wrap it in a wet cloth and take it home. Now, put your leaf in a newspaper and place a heavy book on it. You can also put it under your mattress or a trunk! Take out the leaf after a week. Paste it on a paper and write a		aptitude in daily life. observe the plant and •classify them in in different categories (creepers, climbers, herbs, shrubs and trees) • Identify the different parts of a plant and observe the pattern of the leaf venetion. • Analyze the type of root by just looking the venation • They understand the modification in the root stem and leaves • They observe the different parts of flowers and analyze the different pattern of their leaves.

			poem or story about it. With your leaf collection pasted in a book (a Herbarium), you can become quite an expert		
AUGUST No of Days: 23	**CH-8: BODY MOVEMENT** • Movement • Types of Joints (Hinge, Ball & Socket, Pivotal, Fixed and Gliding) • Role of joints • Muscles	Students will be able to: List the various joints of our body • Differentiate between various kinds of joints • Explain the function of rib cage and skeleton • Describe the movements in other animals	**KNOWLEDGE:** To study : The Skeletal system and the shape of our body **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking • Computational skills. **APPLICATION:** **Role Play - Bones and its functions.** Students will be assigned a bone/bones. They will come and present its function in the entire class. 1. Skull bone 2.Pivot joint 3. Rib cage 4. Spinal Cord 5. Femur **UNDERSTANDING:** • **Study on skeleton** Students can be asked to study the skeleton in the lab. Students must observe the number of bones, type of joints and the size and shape	• Logical-mathematical • Interpersonal Intrapersonal	Students will be able to: explain the movement • know and understand the function of bones in our body • observe the different joints present in our body and their location • analyze role of muscles in the movement process • develop the ability to differentiate the body movements in in different animals

			of the bones. They can try to count the number of bones in hands, legs, ribs and vertebral column. After the counting, the groups can brain storm on why humans have this particular kind of skeleton. What would be the reasons why all the bones are not of the same size and shape? What is its significance in our daily activities		
SEPTEMBER No of Days: 05	**REVISION: TERM-1**				
CONDUCTION OF TERM-1 ASSESSMENT (Second Week of September)					
OCTOBER No of Days: 22	**CH – 9: LIVING ORGANISMS AND THEIR SURROUNDINGS** • Organisms and the surroundings where they live • Habitat and adaptation • A journey through different Habitats • Characteristics of the living beings **CH 10. MOTION AND MEASUREMENT OF DISTANCES** 1. What is	Students will be able to: 1. define key words of the lesson. 2. Recall living and non Living things. 3. define response to Stimulus. 4. identify the different processes in living Things. 5. describe cellular	**KNOWLEDGE:** To know about plants and animals found in different surroundings like forests, desert, sea, **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking **APPLICATION:** • Germination of seed. • Demonstration of different types of motions. **UNDERSTANDING:**	• Logical-mathematical • Interpersonal intelligence • Intrapersonal intelligence	Students will be able to: • Relate adaptation of plants and animals with their Habitats. •classify the component of habitat as biotic and Abiotic. • classify the organisms on the basis of their Observable features

	Measurement? 2. Why Measurement? 3. How measurements are taken in various Aspects. 4. Conventional and standard units for Measurements. 5. Tools used in measurements 6. Drastic changes in transportation System. 6. Motion and its types.	structure of living things. 6. explain the characteristic features of living organisms. 7. Measure different things. 8. about standard units 9. Explain Different types of motion.	• Bifurcate the Surrounding objects into living and non-living things. •Recall the different animals of water and land.eg. Animals living in forest, desert and ocean. • Make a chart of measurement with hand span and meter scale to know the difference.		• Illustrate an example to show the act of measurement and motion in day to day life. •Practice to use measurements with units in all aspects of life relevantly when required.
NOVEMBER No of Days: 22	**CH 11: LIGHT ,SHADOWS AND REFLECTION** 1. Light as an energy. 2. Sources of light. 3. Vision through eye 4. Rectilinear propagation of light. 5. Pin hole camera 6. Reflection, refraction of light 7. Formation of shadows and images**.**	Students will be able to: 1..Define key word of the lesson. 2. Explain light as a form of energy and sun as its major source. 3. Describe how light makes vision possible with our sense organ eye. 4. Describe how light	**KNOWLEDGE:** • Demonstration of regular and irregular reflection **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking **APPLICATION:** • Making of a pin hole camera. • To study light travels in a straight. **UNDERSTANDING:**	• Logical-mathematical • Interpersonal intelligence Intrapersonal intelligence	Students will be able to: • Illustrate an example to show that light is a form of energy. • Identify the other sources. • Compare the properties of transparent, translucent and • Opaque materials

		travels in straight line. 5. Explain the construction of pin hole camera.	• Demonstration of formation of shadows and images.		with examples in day to day life. • Learn that vision through eye is possible only in the presence of light by reflection.
	REVISION: PT-2				
CONDUCTION OF PT-2 ASSESSMENT (Fourth Week Of November)					
DECEMBER No of Days: 12	**CH 12. ELECTRICITY AND CIRCUITS** 1. Electricity as a form of energy. 2. Sources of electricity 3. Meaning and making of circuit. 4. Components of a circuit 5. Construction of electric bulb. 6. Conductors and insulators 7. Use of symbols in electricity	Students will be able to: • Define and differentiate between circumference and area of circle. • Apply knowledge to solve day to day life problems. .	**KNOWLEDGE:** • To study the various electrical components •To draw a circuit diagram using symbols of electrical components. **SKILLS:** • Reasoning Skills • Writing Skills • Critical Thinking • Observational Skills **APPLICATION:** • Making of a switch.	• Logical-mathematical • Interpersonal • Intrapersonal • Spatial	Students will be able to: • Illustrate an example to show that electricity is a form of energy. • Differentiate the two different ways of obtaining electricity. •Compare conductors and insulators with examples and

			• Demonstration of parts in a bulb and torch light. **UNDERSTANDING:** • Identification and classification of materials into insulators and conductors		•Makes a circuit to test for insulators and conductors.
JANUARY No of Days: 18	**CH-13 FUN WITH MAGNETS** 1. History of magnets 2. Terminology in magnetism 3. Magnetic and non Magnetic substances. 4. Artificial and natural magnets. 5. Properties of magnets. 6. Magnetic field. 7. Uses of magnets. substances. 4. Artificial and natural magnets. 5. Properties of magnets. 6. Magnetic field. 7. Uses of magnets	The students will be able to 1. Define key words of the lesson 2. List the uses of magnets. 3. Describe the history of magnetism story of Shepherd). 4. Explain the difference between a) Magnetic and non-magnetic substances b) Artificial and natural magnets. 5. Demonstrate the properties of magnets with figure and activities. 6. Explain magnetic	**KNOWLEDGE:** Study of properties of magnets practically **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking • Computational skills. **APPLICATION:** Practice to use magnetic compass while going to new places for finding directions**.** **UNDERSTANDING:** Use gadgets with magnets, taking necessary precautions**.**	• Logical • Interpersonal intelligence Intrapersonal intelligence	Students will be able to: 1.Learn to read and write the meanings of the key words. 2. Restate the story behind magnetism. 3. Differentiate (a) Natural and artificial magnets. (b) Magnetic and non magnetic substances. 4. Identify the properties of magnets and draw figures. 5. Recall the uses of magnets in various devices

		field.			
FEBRUARY No of Days: 23	**CH-15 AIR AROUND US** 1. Presence of air 2. Composition of air 3. Uses of air 4. Oxygen cycle 5. Causes of air pollution. 6. Effects of air pollution. 7. Difference between burning and combustion	Students will be able to: 1. Define key words of the lesson 2. Explain air is everywhere in our surroundings 3. Summarize the causes of air pollution. 4. Describe the effects of air pollution. 5. Summarize the activities to show the presence of air and also air is needed for combustion. 6. Describe the composition of air.	**KNOWLEDGE:** To prove that air is present in the water. To prove that air is required for combustion **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking • Computational skills. **APPLICATION:** • Making objects like firkin to know usage of air **UNDERSTANDING:** • Working of windmills • Motion of yachts. • Weather cock. • Necessary for breathing	• Logical-mathematical intelligence • Intrapersonal • Computational intelligence	Students will be able to: • Understand about importance of air • Differentaite constitutents of air • Know the presence of air everywhere.
	REVISION: TERM-2				
MARCH	**CONDUCTION OF TERM-2 ASSESSMENT**				