INFANT JESUS CONVENT SCHOOL
ANNUAL PLAN
MATHEMATICS
CLASS: VI

MONTH/NO OF DAYS	TOPIC: SUB TOPIC	OBJECTIVES	AIDS/ACTIVITIES	MULTIPLE INTELLIGENCE SKILLS	LEARNING OUTCOME
APRIL No of Days: 18	**Ch1: Components of Food** • Carbohydrate • Protein • Fat • Vitamin and minerals • Roughage • Water • Test for various components **Ch2: Sorting Materials into Groups** • Basis of grouping •Properties of material • Need of grouping	Students will be able to explain • Different nutrients (carbohydrate protein fat vitamins minerals fibres and water) • Test of nutrients (starch protein and fat) • Understand the meaning of matter, object, material and classification • explain basis of grouping of materials • Differentiate properties of material (appearance, hardness/softness, solubility, flotation and transparency) • explain the Importance of grouping	**KNOWLEDGE:** • 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. • Sprouting of moong dal and prepare a report on its nutritional value.	• Logical • Interpersonal • Intrapersonal	Students will be able to: • Identify the components found in the food items • Understand the importance of different nutrients in our food • Understand steps involved to test the different nutrients

			UNDERSTANDING: • To explain the process of sprouting. • To understand about diet and nutrition.		
MAY No of Days: 14	**Ch 3: Separation of Substances** • Hand picking • Threshing • Winnowing • Sieving • Sedimentation • Decantation • Filtration • Evaporation • Condensation	Students will be able to: • Understand the meaning of matter, object, material and classification • explain basis of grouping of materials • Differentiate properties of material (appearance, hardness/softness, solubility, flotation and transparency) • explain the Importance of grouping • Understand the term element, compound, mixture and pure substance • Explain need of separation • Apply different methods of separation (Hand Picking, Threshing,	**KNOWLEDGE:** • Identify the given materials and group them according to their properties • To prepare saturated solution of common salt. **SKILLS:** • Reasoning Skills • Observational skills • Critical Thinking **APPLICATION:** • Collect samples of vinegar, lemon juice, mustard oil or coconut oil, kerosene or any other liquid. Take a glass tumbler.	• Creativity (while doing the activities) • Logical • Scientific skills	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 aptitude in daily life.

		Winnowing, Sieving, Sedimentation, Decantation, Filtration, Evaporation, Condensation, Churning, Sublimation, Magnetic Separation)	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:** • Activity to show the difference between evaporation and condensation. .		
	REVISION: PT-1				
CONDUCTION OF PT-1 ASSESSMENT(Third Week Of May)					

JULY No of Days: 27	**Ch4: Getting to Know Plants** • Types of plants • Parts of plants: Root, Stem, Leaves & Flower • Parts of a flower	Students will be able to: • Identify the different parts of plant and their functions • Types of venation • Identify the parts of flower	**KNOWLEDGE:** 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:** • Find a plant in your house or in your neighborhood, which has a long but a weak stem? Write its name. In which	• Creativity (while doing the activities) • Logical • Scientific skills • Exploring.	Students will be able to: •classify them in in different categories (creepers, climbers, herbs, shrubs and trees) • Identify the different parts of a plant and observe the Venetian pattern of the leaf • 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

			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:** • **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		pattern of their leaves.

			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 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	**Ch5: Body Movement** • Movement • Types of Joints (Hinge, Ball & Socket, Pivotal, Fixed and Gliding) • Role of joints • Muscles CHP 11 AIR AROUND US 1. Presence of air 2. Composition of air 3. Uses of air 4. Oxygen cycle	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 • Explain air is everywhere in our Surrounding • Summarize the causes of air pollution. • Describe the effects of air pollution. • Summarize the activities to show the presence of air and also air is needed for Combustion	**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 6. Girdles **UNDERSTANDING:**	• Logical-mathematical • Interpersonal • Intrapersonal • Logical-mathematical intelligence • Intrapersonal Computational intelligence	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 Students will be able to: • Understand about

	5. Causes of air pollution. 6. Effects of air pollution. 7. Difference between burning and combustion	• Describe the composition of air.	**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 of the bones. **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		importance of air • Differentiate constitutents of air • Know the presence of air everywhere.

			UNDERSTANDING: • Working of windmills • Motion of yachts. • Weather cock. • Necessary for breathing		
SEPTEMBER No of Days: 05	**REVISION:TERM-1**				
CONDUCTION OF TERM-1 ASSESSMENT(Second Week of September)					
OCTOBER No of Days: 22	**CH – 6: Living organisms and their surroundings** • Organisms and the surroundings where they live • Habitat and adaptation	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.	**KNOWLEDGE:** To know about plants and animals found in different surroundings like forests, desert, sea, **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking	• 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

	• A journey through different Habitats • Characteristics of the living beings	5. Describe cellular structure of living things. 6. Explain the characteristic features of living organisms.	**APPLICATION:** • Germination of seed. **UNDERSTANDING:** • 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.		

NOVEMBER No of Days: 23	**CH 7**. MOTION AND MEASUREMENT OF DISTANCES 1. What is 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.	Students will be able to: 1.Measure different things. 2. About standard units 3. Explain Different types motion.	**KNOWLEDGE:** • To know about different types of motions • Understanding need for measurement. • Ancient methods of measurement. **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking **APPLICATION:** • Demonstration of measurements. • Identification and classification of different types of motion.	• Logical-mathematical • Interpersonal intelligence • Intrapersonal intelligence	Students will be able to: • 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.

			UNDERSTANDING: • Make a chart of measurement with hand span and meter scale to know the difference.		
	REVISION: PT-2				
CONDUCTION OF PT-2 ASSESSMENT(Fourth Week Of November)					
DECEMBER No of Days: 11	**CH 8 :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,	The 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 travels in straight line. 5. Explain the construction of pin hole camera.	**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:** • Demonstration of formation of	• Logical • 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 with examples in day to day life. • Learn that

		6. Differentiate between transparent, translucent and opaque materials. 7. Demonstrate how shadows and images are formed with the concept of light .	shadows and images.		vision through eye is possible only in the presence of light by reflection
JANUARY No of Days: 21	**CH 9:** ELECTRICITY AND CIRCUITS 1. Electricity as a form of energy.	The students will be able to 1 Describe the importance of symbols and how they are used	**KNOWLEDGE:** • Demonstration of regular and irregular reflection • To study the various	• Logical • Interpersonal intelligence • Intrapersonal intelligence	Students will be able to: 1 Students will be able to: • Illustrate an

	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	in the concept of electricity. 9. Describe how electricity is available to us. 10. Explains construction of an electric bulb, cell and a torch. 11.Summarize that conductors and insulators go hand in hand. 12.Demonstrate simple connections in circuit. 13.Differentiate between conductors and insulators	electrical component • To draw a circuit diagram using symbols of **SKILLS:** • Reasoning Skills • Aesthetic skills • Critical Thinking **APPLICATION:** • Making of a pin hole camera. • To study light travels in a straight. • Making of a switch. • Demonstration of parts in a bulb and torch light. **UNDERSTANDING:** • Demonstration of formation of shadows and images. • Identification and		example to show that electricity is a form of energy. • Identify the other forms. • Practice to use symbols relevantly when required. •Differentiate the two different ways of obtaining electricity. •Compare conductors and insulators with examples and •Makes a circuit to test for

			classification of materials into • Insulators and conductors		insulators and conductors.
FEBRUARY No of Days: 22	CH 10 :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.	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	**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	• 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 Natural and artificial magnets. 4. Magnetic and non magnetic substances. 5.Identify the

	7. Uses of magnets. substances. 4. Artificial and natural magnets. 5. Properties of magnets. 6. Magnetic field. 7. Uses of magnets.	magnets. 5. Demonstrate the properties of magnets with figure and activities. 6. Explain magnetic field.	directions. **UNDERSTANDING:** Use gadgets with magnets, taking necessary precautions.		properties of magnets and draw figures. 6. Recall the uses of magnets in various devices
	REVISION:TERM-2				
MARCH	**CONDUCTION OF TERM-2 ASSESSMENT**				