

NAME OF THE DEPARTMENT - AII PRIMARY SCIENCE SYLLABUS BREAK UP 2021-22 -AII																	
Name of the Subject Teachers:-Mrs. Eisy & Mrs.Sameena																	
Grade:-5																	
MONTH	WEEK	Unit/Section	No of Periods	Topic Break Down / for Periods/Learning objectives / progression	Learning Outcomes/ Skills acquired	Activities (Formative assessment tasks, projects, Visits) INCLUDING VIRTUAL LEARNING	Teaching Aids / Reference/ Resources	Competencies and Values	MY IDENTITY	Cross curricular link	Art Integration	Critical thinking questions subjective	Critical thinking questions objective				
APRIL	4	L1-More about plants	10	*Recognize the different ways by which plants reproduce *Investigate how seeds need water air , light and warmth for germination. *Observe how seeds can be dispersed in a variety of ways. *Describe the process of vegetative propagation through the different parts of a plant like stem, roots and leaves. *Distinguish between the different types of crops. *Explain the different stages of agriculture.	Students will be able to describe an experiment to identify the effects of sunlight, water and soil on the process of germination. Students will be able to identify and label radicle, plumule and embryo as parts of a germinating seed. Students will be able to explain the need for seeds to get dispersed away from the parent plant. Students will be able to describe the process of vegetative propagation through the different parts of a plant like stem, roots and leaves. Students will be able to distinguish between the different types of crops. Students will be able to describe the different stages of agriculture.	Seed dissection Students will dissect the seed to observe and identify Germination Keep some seeds in a tray to observe the germination Rose stem/Hibiscuss stem activity Plant a Rose stem/Hibiscuss stem to and observe the growth and write your observations *Ms teams /PPT/Video	Rajma seeds , clay (colour- brown and white) Glass/tumbler ,rajma seeds, cotton ,water Rose stem/Hibiscuss stem, pot with soil	Competencies Comp.Collaboration .Prediction ,Observation, Conclusion, Communication Values:- care , honesty , respect , tolerance, resilience, Integrity, resilience	Various kinds of seeds available in U.A.E	Mathematics Count the number of seeds found in the given specimens And make a table chart.	Make a model of structure of seed with clay and label it. Observe the germination of seed and draw various stages in a chart paper.	1.Why do we need to store crops in dry, airtight and small animal proof containers? 2.Differentiate between kharif and rabi crops. 3.How can we get healthy crops? 4.Why is seed dispersal important? 5.Why should seeds be dispersed? 6.Some seeds have hooked spines. Why? 7.Rice is mostly grown in west Bengal . Why? 8.Why coconut trees are found great numbers in coastal areas? 9. Differentiate between radicle and plumule. 10.Why are all the seeds produced by plants unable to grow into new plants? 11.How are plants and animals depend on each other?	1.What would you plant in soil to get a new rose plant in your garden? A) Bud B) Stem C) Leaves D) Root 2.Read the given statements carefully and find the correct answer Statement I: All plants have fruits that produce a large number of seeds Statement II: Some plants reproduce by vegetative propagation. A) I is correct II is incorrect B) II is correct, I is incorrect C) Both I and II are incorrect D) Both I and II are correct 3.Photosynthesis in plant does not require? A) Water B) Carbon dioxide C) Sunlight D) Oxygen				
	APRIL		L2-Animals in their surroundings	12	Recognise the different types of habitats. *Discuss the need for various kinds of body coverings in animals. *Relate the body parts to the animals eating habits. * Describe the different ways of breathing and the organs involved in different animals. *Examine how the body parts involved in movement of animals help them to adapt to the environment. *Explain migration with relevant examples.	Students will be able to recognise the different types of habitats. Students will be able to discuss the need for various kinds of body coverings in animals. Students will be able to relate the body parts to the animals eating habits. Students will be able to describe the different ways of breathing and the organs involved in different animals. Students will be able to Examine how the body parts involved in movement of animals help them to adapt to the environment. Students will be able to explain migration with relevant examples.	Create the model mouth parts of herbivorous and carnivorous animals *Ms teams /PPT/Video	Clay (white and pink) Scrap book,pictures colour pencils	Competencies Experimenting, Prediction , Observation ,Conclusion, Communication ,Observation , Collaboration Problem solving, Critical thinking values:- care , honesty , respect , tolerance, resilience, Integrity, resilience	Animals found in UAE	Geography Extinct animals in India , Srilanka Pakistan	Make a model of teeth of herbivore and carnivore The Scrap book activity -Collect the pictures and informations of migrating animals and birds and paste it in the Scrap book.	1.Why do animals move from one place to another? 2.How do insects breathe? 3.How do fish move in water? 4. Why do some animals migrate? 5.Why does a fish die when taken out of water? 6.Dolphins and whales often come to the surface of water. Why? 7.How do migrating animals find their way? 8.How is the body of fish adapted to swim in water? 9. How is the body of bird adapted to fly? 10.How birds reptiles and human beings are similar? 11.An eagle and an ostrich both have beaks. What is the difference between them?	1. Animal 'X' eats plant parts. It gives birth to young ones and feeds them with milk. Identify the animal 'X' A) Fox B) Goat C) Tiger D) Lion 2. Which one of the following adaptation is not found in fishes? A) Air bladder to float on the surface of water B) Fins to swim and maintain balance in water. C) Wading limbs to swim and wade D) Streamlined body 3. Which of the following statements is / are correct? (i) Arctic tern travels from Antarctic to Arctic in winter. (ii) Monarch butterflies travel from Canada to Mexico during the winter season. (iii) Salmon swim long distances to reach sea to lay eggs. (iv) Siberian cranes come to India during winter. A) (i) and (iii) B) (ii) and (iv)			
					Analyse the various parts of the human skeleton . * Describe the basic functions of the human skeleton. * Describe the basic structure of a bone and label its parts. * Discuss the structure and functions of the parts of the skeleton. *Recognise the significance of joints in our body. *Classify the joints according to their functions. Students will be able to distinguish between the types of muscles.	Students will be able to analyse the various parts of the human skeleton . Students will be able to describe the basic functions of the human skeleton. Students will be able to describe the basic structure of a bone and label its parts. Students will be able to discuss the structure and functions of the parts of the skeleton. Students will be able to recognise the significance of joints in our body. Students will be able to classify the joints according to their functions. Students will be able to distinguish between the types of muscles.	Make model of skeleton *Ms teams /PPT/Video	Foam board,clay (white),stickynotes	Competencies Collaboration Experimenting Prediction , Observation Conclusion, Communication Values :-care , honesty , respect , tolerance, resilience, Integrity, resilience	U.A.E Discuss about the Hospitals of U.A.E	Mathematics Count the number of bones present in various parts of skeletal system and compare it with bones present in babies	Create the model of skeleton label the parts.	1. Identify and name the joint shown here. b. List any two parts of the human body we see this joint. c. How does it work? Explain 2.Why is skeleton necessary? 3.What would be the disadvantage of having fixed lower jaw? 4. Why are ligaments necessary? 5.What would happen if there was no fluid between the brain and the skull? 6.How is spinal cord protected from jerks and injuries? 7.What would happen if the backbone is made of a single bone? 8. If the lower jaw was not movable,what activities would you not able to do? 9.How are ligaments differ from tendons? 10. What would happen if there were no joints?	1. There are _____ pairs of ribs in human beings. A) 2 B) 3 C) 10 D) 12 2. Which bone protects the brain? A) Calcium B)The cranium C)The cerebrum D)The cerebellum 3. The purpose of the rib cage is to... A) protect the stomach B) protect the spinal cord C) protect the heart and lungs D) provide an object to which the lungs can attach 4. What makes bones so strong? A)Silica B)Cartilage C)Blood and marrow D)Calcium and phosphorus			
					4	L3-The skeletal and the Muscular system	12	Explain the structure and functions of the nervous system. *Identify the location and function of the major parts of the brain. *Describe the location and function of the spinal cord. *Summarise the different types of nerves and their functions associated with the nervous system. *Explain the role of the nervous system as a central governing organ of the human body. *Discuss the structure and function of the sense organs that connect us to our surroundings. *Illustrate the importance of the five sense organs in protecting the body through reflex actions.	Students will be able to explain the structure and functions of the nervous system. Students will be able to identify the location and function of the major parts of the brain. Students will be able to describe the location and function of the spinal cord. Students will be able to summarise the different types of nerves and their functions associated with the nervous system. Students will be able to explain the role of the nervous system as a central governing organ of the human body. Students will be able to discuss the structure and function of the sense organs that connect us to our surroundings. Students will be able to illustrate the importance of the five sense organs in protecting the body through reflex actions.	Create model of brain Create a model of neuron with macroni ,clay and thread Draw or create the parts of an ear and eyes. *Ms teams /PPT/Video	Clay (pink),paper plate Foam sheet ,macroni ,clay and thread Clay ,chart and colour pencils	Competencies Collaboration Experimenting Prediction ,Observation Conclusion, Communication Observation ,Experimenting Problem solving, Critical thinking Values :-care , honesty , respect , tolerance, resilience, Integrity, resilience	Discuss about the nerves related diseases found in UAE	Geography Epidemic and pandemic diseases of various different countries	Make a model of brain and label the parts Make a model of neuron with macroni clay and thread and label.	1.How do neurons communicate with one another? 2.The brain need a continuous supply of blood and oxygen.Why? 3.What could happen if we clean our ears with a pointed object? 4.While driving a scooter one must wear a helmet. Why? 5.What will happen if the hair inside the nose are cut and removed? 6.People can have brown,black, blue or green eyes. Which part of the eye gives it this spec? 7.What would happen if a nerve connection from your hand is broken?How can it affect	1. A typical brain weighs how much?(2.7 metric tons, 1.4 kilograms, 85 grams, 6.6 pounds) breathing?(Pituitary Gland, Cerebrum Cerebrum, Brain Stem) 3.The brain looks like which 4.If you are right handed , then it is the _____ side which helps you write(center of the brain,, right side of the brain,, left side of the brain, back side of the brain) 5. Which of the following is a genetic disease that causes neurons in the brain to waste away and die?(Multiple sclerosis, Polio, Encephalitis, Huntington's disease) 6.Cerebral palsy affects neurons in which part of the body?(Brain, Spine, Muscles, None of the above) 7.A filament that arises from the neuron cell body and extends for micrometers. A cluster of them forms a tree:(Dendrite, Axon, Soma) 8.After an accident, a person lost his speech and memory. Which part of his brain was affected----(Medulla ,cerebrum ,Reflex action, nervous system)
					JULY	4	L4-Nervous system	12	Explain the structure and functions of the nervous system. *Identify the location and function of the major parts of the brain. *Describe the location and function of the spinal cord. *Summarise the different types of nerves and their functions associated with the nervous system. *Explain the role of the nervous system as a central governing organ of the human body. *Discuss the structure and function of the sense organs that connect us to our surroundings. *Illustrate the importance of the five sense organs in protecting the body through reflex actions.	Students will be able to explain the structure and functions of the nervous system. Students will be able to identify the location and function of the major parts of the brain. Students will be able to describe the location and function of the spinal cord. Students will be able to summarise the different types of nerves and their functions associated with the nervous system. Students will be able to explain the role of the nervous system as a central governing organ of the human body. Students will be able to discuss the structure and function of the sense organs that connect us to our surroundings. Students will be able to illustrate the importance of the five sense organs in protecting the body through reflex actions.	Create model of brain Create a model of neuron with macroni ,clay and thread Draw or create the parts of an ear and eyes. *Ms teams /PPT/Video	Clay (pink),paper plate Foam sheet ,macroni ,clay and thread Clay ,chart and colour pencils	Competencies Collaboration Experimenting Prediction ,Observation Conclusion, Communication Observation ,Experimenting Problem solving, Critical thinking Values :-care , honesty , respect , tolerance, resilience, Integrity, resilience	Discuss about the nerves related diseases found in UAE	Geography Epidemic and pandemic diseases of various different countries	Make a model of brain and label the parts Make a model of neuron with macroni clay and thread and label.	1.How do neurons communicate with one another? 2.The brain need a continuous supply of blood and oxygen.Why? 3.What could happen if we clean our ears with a pointed object? 4.While driving a scooter one must wear a helmet. Why? 5.What will happen if the hair inside the nose are cut and removed? 6.People can have brown,black, blue or green eyes. Which part of the eye gives it this spec? 7.What would happen if a nerve connection from your hand is broken?How can it affect
SUMMER VACATION																	
SEPTEMBER	4	L5-Good health	12	* Explain the importance of carbohydrates and fats in the diet. * Tabulate the important sources of proteins in their diet. * Summarise the important functions of the proteins in our body. * Identify the kinds of vitamins and minerals. *Differentiate between communicable and non communicable diseases.	Students will be able to explain the importance of carbohydrates and fats in the diet. Students will be able to tabulate the important sources of proteins in their diet. Students will be able to summarise the important functions of the proteins in our body. Students will be able to identify the kinds of vitamins and minerals. Students will be able to summarise the causes and preventive measures of non communicable diseases.	Collect the pictures of the food and list the nutrients present in them. *Ms teams /PPT/Video	Chart, brochures ,glue ,colours	Competencies Collaboration communication Creativity Critical Thinking Values:-Tolerance Honesty	Research on varieties of food items available in malls of U.A.E	Geography Collect the information on Kharif and Rabi crops grown in Asian countries	Collect the supermarket brochures and create a food pyramid. Make a poster to show the various methods to prevent the communicable diseases especially covid 19.	of the following meals she should eat the night before to provide the most energy for the race? (Milk, Cereals, Chips, Bugar)1. An athlete is preparing to run a marathon (26.2 miles), decide which of the following meals she should eat the night before to provide the most energy for the race? (Milk, Cereals, Chips, Bugar)2. Jerry wants to build up his muscles, which food group intake he should increase ? (Carbohydrates, Fats, Proteins, vitamins) 3.What happens when you eat more carbohydrates in your diet? (they get flushed out in your urine, they make you hyped up, they give you a headache, they get converted into fat?) 4.Your body can make Vitamin D when it is exposed to sunlight. a.true b false5.When trying to maintain a balanced diet it is important:- (eat from all of the food groups, eat more fruits and vegetables than anything else, completely avoid all fats and sugars, skip breakfast once a week) 6. This mineral helps to regulate and maintain the balance of fluids in the body.Table salt is a major source of this mineral. What is the mineral? (water, fat,sodium, calcium)7.7. When we eat rice chapatti we get a	1.Sahil has been told by the doctor that he has less iron in his blood. What would you advise sahil to eat? 2. Why is it not a good idea to fill up your plate with only 1 kind of food? 3. Why do athletes need glucose? 4. Sinta has fallen sick, she couldn't go to school regularly.Why? 5. Naem cannot see the board and is unable to see the board. What kind of deficiency disease Naem is suffering from? How can we prevent this disease? 6.Jia feel tired all the time.Recently she went to the doctor who told her that she has weak muscles. Which deficiency disease is caused by it?How to				

OCTOBER	5	Air and water	10	*Identify the various layers of atmosphere. *Discuss the properties of air and water. *Distinguish between soluble and insoluble impurities.	*Students will be able to identify the various layers of atmosphere. *Discuss the properties of air and water. *Students will be able to distinguish between soluble and insoluble impurities.	*Experiments to show the properties of air. *Activities to separate soluble and insoluble impurities. *Ms teams /PPT/Video	Beakers testtubes balloons candles soluble and insoluble impurities.	Competencies Collaboration Independent learning Critical thinking Values :-care , honesty , respect	* Design a poster warning people in the UAE about the dangers of the shortage of water.(Explanation should be in Arabic and English) * Research what methods do Emirati people used before to separate soluble and insoluble impurities form water. Include drawings or pictures to help explain your answer.	Conduct a research work on the occurrence of Solar and lunar eclipses in UAE. * Find out what is Blue blood moon. Has it occurred in UAE before?	English:-Write a poem describing the beauty of moon Maths:-Note down the weight of each member of your family. Find out how much they would weigh on Moon.	Make a poster to create an awareness on fire safety.	Band aids Gauze Antibacterial wipes All of these 2. The immediate medical help given to an injured person before the doctor arrives is called "first aid". True False 3. For simple cuts and wounds with iron or sharp object, you must... Keep a cold pack over the patient's forehead. Get treated with anti-tetanus injection within 24 hours. Drink a cool fruit juice to hydrate the body.A crack in the bone is called: Sprain Fracture Heat stroke 5. A dog bite may spread a life-threatening disease called: malaria cholera rabies chickenpox 6. For putting out a fire caused by petrol, we should--- (Switch off the electricity supply. Turn off the gas supply..Throw water on it. Throw lots of sand on it.) 7. Accidents happen because of---(Carelessness of others., Our carelessness..Hurry)	1.How do you help someone with a bleeding nose? 2.Manu is four year old boy .His mother keeps all the medicines on the top shelf of the rack. Why? 3.Firemen crawl on the floor of a room that is filled with smoke. Why do they do this? 4.What will you do if your friend is bitten by a dog? 5.Why should we not scratch blisters on the skin? 6.Why are small children given tetanus injections even before an injury? 7.We must not prick blisters. Why? 8.How will you put out a fire caused by defective wiring? 9.When someone's clothes catch fire,we must not let him run around in panic. Why? 10.How is rabies caused?
				*Demonstrate how to give first aid in case of sprains , nose bleeding , fractures , animal bites and burns.	Students will be able to demonstrate how to give first aid in case of sprains , nose bleeding , fractures , animal bites and burns	Poster making on fire safety Demonstrate first aid for fractures *Ms teams /PPT/Video								
NOVEMBER	4	Earth , sun and Moon	12	*Identify the various phases of moon . *Explain the formation of phases of moon . *Describe the formation of lunar and solar eclipse. *Describe man 's first landing on the Moon. *Research the lives and discoveries of scientists who explored the solar system and stars.	*Students will be able to identify the various phases of moon . *Students will be able to explain the formation of phases of moon . *Students will be able to describe the formation of lunar and solar eclipse. *Students will be able to describe man 's first landing on the Moon. *Research the lives and discoveries of scientists who explored the solar system and stars.	Make a model of the Solar system *Show the formation of Solar and Lunar eclipses using tennis ball , foot ball and a torch *Ms teams /PPT/Video	tennis ball foot ball torch Model of solar system Model of phases of the Moon	Competencies Creativity Digital competence Values:- Integrity, respect	* Conduct a research work on the occurrence of Solar and lunar eclipses in UAE. * Find out what is Blue blood moon. Has it occurred in UAE before?	English:-Write a poem describing the beauty of moon Maths:-Note down the weight of each member of your family. Find out how much they would weigh on Moon.	Make a model of phases of the Moon using a clay	1.All weather changes take place in the exosphere. mesosphere.c.stratosphere,troposphere. A cold drink bottle mouth was capped with a balloon. Which action can lead to increase in the size of atmosphere? 2.When a burning candle is covered with a glass, it gets extinguished. Why does this happen?. What does this		
				Changes in our environment	10	*Explain the causes and effects of different types of pollution. *Discuss the importance of saving our environment. *Differentiate between biodegradable and non biodegradable waste. *Discuss positive and negative influence of humans on the environment.	*Students will be able to explain the causes and effects of different types of pollution. *Students will be able to discuss the importance of saving our environment. *Students will be able to differentiate between biodegradable and non biodegradable waste. *Students will be able to discuss positive and negative influence of humans on the environment.	*Ms teams /PPT/Video. * *Discuss the ways in which pollution is taking place and think of the ways to control it. *Make posters on kinds of pollution -air pollution , water pollution , soil pollution and noise pollution	Chart pencils/pens Color	Competencies and Values Collaboration Communication Values:- Integrity, honesty	*Conduct a research wok on *How Government of UAE promote sustainability. Support your findings with examples.	Create an awareness among the people about the importance of saving environment.	Create a poster on save environment	
				Rocks and minerals	8	*Classify different types of rocks. *Describe the texture and uses of different types of rocks. *Distinguish between types of minerals. *List the methods of conservation of natural resources.	*Students will be able to classify different types of rocks. *Students will be able to describe the texture and uses of different types of rocks. *Students will be able to distinguish between types of minerals. *Students will be able to list the methods of conservation of natural resources.	Ms teams /PPT/Video. *An activity to find out the texture of various rocks. *Collect the samples of various types of rocks. *List some rocks that are used to make school buildings	Types of rocks Granite Basalt Pumice Conglomerate Sandstone Shale Graphite Slate	Competencies Critical thinking . *Collaboration *Communication * Values:- Integrity, honesty	Conduct a research work on the types of rocks found inlebel Hafeet mountain .Prepare a report on it. *Collect the samples of various types of rocks. *List some rocks that are used to make school buildings	Social studies:- On a map of India mark the following a. Places where coal is extracted b. Places where petroleum is extracted c. Places where diamonds are mined	Make a model of a house using a clay / cardboard / any types of rocks	
						WINTER VACATION								
				DECEMBER	3	Soil	5	*Illustrate the different layers of soil. *Describe the factors causing soil erosion . *List the methods of conservation of soil.	*Students will be able to Illustrate the different layers of soil. *Students will be able to describe the factors causing soil erosion . *Students will be able to list the methods of conservation of soil.	Ms teams /PPT/Video Arrange the layers of soil Samples of soil	Samples of soil Layers of soil	Competencies Critical thinking * Communication * Values :-care , honesty , respect	Collect different types of soil from different parts of UAE and find out what are the special components in it.Find out whether the soil is fertile or not . Prepare a report on it.	Social studies:- Research on different types of soil found in different areas of the world
States of matter	12	*Investigate how materials change when they are heated and cooled. *Infer that solids dissolve in liquids to form a solution. *Distinguish between miscible and immiscible liquids. *Differentiate between physical and chemical changes.	*Students will be able to investigate how materials change when they are heated and cooled. *Students will be able to infer that solids dissolve in liquids to form a solution. *Students will be able to distinguish between miscible and immiscible liquids. *Students will be able to differentiate between physical and chemical changes.					Ms teams /PPT/Video * Solubility cavities to be done. *Distinguish between miscible and immiscible liquids. *Activities to prove physical and chemical changes.	Beakers testtubes balloons , match box, apples , papers , candles , soluble and insoluble impurities , miscible and immiscible liquids.	Competencies Problem solving * Critical thinking * Values:- Integrity	* Group discussion on states of matter * An experiment to prove that states of matter are interchangeable. * Check the solubility of given substances in water.	Observe different food items being prepared in the kitchen.List any 10 food items and state whether their preparation involves a physical change or chemical change		
JANUARY	3	More about force , energy and simple machines	10	*Classify the types of forces. *Differentiate between kinetic energy and potential energy.	*Students will be able to classify the types of forces. *Students will be able to differentiate between kinetic energy and potential energy.	*An activity to prove that a force can change the direction of a moving object , change the shape of an object , make an object	Bat , ball , ground , tennis court , models of simple machines	Critical thinking * Communication * Values :-care , honesty , respect	Find more information about the ancient tools used in UAE . Write its Arabic name .	*Value education- Air conditioners give out a lot of beta and also release harmful gases.This harms the environment and causes global	Make a model of...			

