

SRI LANKAN SCHOOL - MUSCAT		SCHEME OF WORK		ACADEMIC YEAR 2016 / 2017	
CLASS : YEAR 9		SUBJECT: Biology		TEACHER : Tharindu Galappaththi	
Month	No.of Periods	Unit No.	TOPIC / DETAILS	INTENDED LEARNING OUTCOMES	Remarks
September		1st Term			
Week 1, 2	3	13	Plants	Students study the factors required and the wording equation of photosynthesis. Students write the steps involve in testing the presence of starch in a plant leaf and perform the experiment in the lab. Students describe how to show sunlight and carbon dioxide is essential in photosynthesis.	
		13.1	Photosynthesis		
Week 3		Eid Holidays			
Week 4	3	13.3	Plant growth	Describe the roles of different mineral ions involve in plant growth with their deficiency symptoms. Students differentiate hydroponics and aeroponics, list down the advantages and disadvantages of those. Explain what is active transport.	
Week 5	3	13.4	Phytoextraction	Describe what is phytoextraction and how it can affect health . Understand that movement of substances into and out of cells can be by diffusion, osmosis and active transport	
			Assessment I		
October		October			
Week 6	3	13.5	Flowers	Describe the role of each part of the flower. Understand flower as the reproductive organ in a flowering plant. Explain what is pollination and fertilisation. Describe types of pollination, mediators cause pollination and the adaptations for that. Expalin the process of fertilisation.	
Week 7	3	13.6	Seed dispersal	Explain what is germination and the factors that affect germination. Describe the importance of seed dispersal. List down types of seed dispersal methods and the adaptations.	
		13.7	Unit review		
Week 8	3	14	Adaptation and survival	Understand the importance of adaptation. Define what is adaptation and types of it. Explain the structural and behavioural adaptations using the examples of naked mole rat, polar bear, eagle, tiger, camel.	
		14.1	Adaptation		
Week 9	3	14.2	Extreme adaptations	Describe different adaptations of extreme environments such as desert, polar region and the ocean depth.	

			Assessment 2		
November					
Week 10	3	14.3	Survival	Recognise that existing adaptations can become less useful if the environment changes. Describe the importance of survival and how it helps in the process of natural selection.	
Week 11	3	14.4	Sampling techniques	Describe how sampling techniques can be used to estimate populations. Explain using quadrats.	
Week 12	3	14.5	Studying the natural world	Describe how scientists study the natural world : observing, following tracks, using automatic cameras, electronic tags	
Week 13	3	14.6	Unit review		
December					
Week 14	Revision				
Week 15	1st Term End Exams				
Week 16	1st Term End Exams				
Week 17	Assesment and Report work				
	December Vacation				
Week 18	December Vacation				
January					
School Reopens - 2nd Term					
Week 19	Vacation				
Week 20	3	15 15.1	Energy flow Food webs	Construct food chains and webs and explain what they show; (Trophic levels, producer and consumer relationship)	
Week 21	3	15.2	Energy flow	Model energy flow through food chains and loss of energy along the trophic levels . Drawing biological pyramids; energy,number, biomass	
Week 22	3	15.3	Decomposers	Explain the role of decomposers.	
			Assessment 4		
February					
Week 23	3	15.4	Changing populations	Describe factors affecting the sizes of populations.	
		15.5	Facing extinction	Describe factors affecting the sizes of populations.	
		15.6	Maintaining biodiversity	Explain why biodiversity is important.	

Week 24	3	15.7		Unit review	
Week 25	3	16 16.1	Human Influences Air pollution	Describe the causes and consequences of air pollution. Compare evidence from first-hand experience with secondary sources.	
Week 26	3	16.2	How Scientist work	Understand the relationship between carbon dioxide production and global warming. Reccognise how scientists work today and how they worked in the past.	
			Assessment 5		
March					
Week 27	3	16.3	Water Pollution	Describe the causes and consequences of water pollution.	
Week 28	3	16.4	Saving rainforest	Understand why deforestation is happening. Discuss ways of limiting deforestation.	
Week 29	3	16.5	Unit review Revision		
Week 30	Revision , 2nd Term End Exams				
Week 31	2nd Term End Exams				
April					
Week 32	Assesment and Report work				
Week 33	April Vacation				
School Reopens - 3rd Term					
Week 34	2	17 17.1	Discusion of 2nd Term test paper Variation andclassification Using identification keys	Use and construct identification keys	
Week 35	3	17.2 17.3	What makes us different Chromosomes	Understand that organisms inherit characteristics from their parents through genetic material that is carried in cell nuclei. Recognise that genes are parts of chromosomes. Understand that we inherit two copies of each chromosome, one from each parent.	
May					
Week 36	3	17.4	Investigating inheritance	Use ideas about dominant and recessive alleles to predict the characteristics offspring will inherit. Construct genetic diagrams.	
Week 37	3	17.5	Selective breeding	Describe how slective breeding can produce new varities. Mention the applications of selective breeding in agricultute field and farm industry.	

Week 38	3	17.6	Developing a theory	Describe how new theories are developed.	
Week 39	3	17.7	Darwin's theory of evolution	Describe Darwin's theory of evolution by natural selection.	
			Assessment 6		
Week 40	3	17.8	Moving genes	Describe how living things can be genetically engineered to make new products.	
June					
Week 41	3	17.9	Using genes	Understand that selective breeding and genetic engineering can be used to produce medicines.	
Week 42	3	Revision			
Week 43	3rd Term end exams				
Week 44	Eid al- Fitr holidays, paper corrections				
July					
Week 45	Assesment and Report work Paper correction				
Week 46	Summer Vacation				