## AEL 5 1st Semester Science Carriculum (2018- 2019)

Unit	Week No.	Content/ Grammar	Reading/ Phonics	Projects / Graded Assignments	Exam Content	Government Objectives
4. Preservation of Living Organisms	1	4.1 Hereditary Characteristics. Page 108 4.1 Who Do I Look Like? Page 109 4.2 Genetic Variation. Page 115  Learning Activity: Hereditay Characteristics. Page 117	species, diverse, characteristic, variation, genetic variation, inheritance, traits, genetic traits,	Match pictures of parents and their respective young. (10 points)		Strand 1: Living and Family Standard Sc1.2  6. Explore, compare and specify their own characteristics and those of their family
		4.2 The Biodiversity of living Organisms in Your Local Area. Page 118	offspring, parents, tallness, roll, ability, inability, curly single, double,		Basic definitions, genetic traits, genetic variation, genetic transmition, vertebrates and invertebrates as well as biological diversity.	members.  7. Explain genetic transmission of each generation of living things.  8. Distinguish between flowering and non-flowering plants.  9. Specify characteristics of monocellular and multicellular plants by using their external organs as criteria.  10. Categorise animals into groups by using external characteristics and some internal characteristics as criteria.
	3	4.3 Plants in Our Local Area. Page 120 4.2.2 Animal Diversity and classification. Page 124		Match pictures of genetic traits with their respective descriptions. (10 points)  Name genetic traits that can be passed on from parents to their children. (10 points)		
	4	4.4 The classification of Animals. Page 129 4.2.3 Conserving Biodiversity. Page 132				
		4.5. Ways to Protect and Preserve Animals in Local Areas. Page 134  Learning Activity: The Biodiversity of living				
	5	Organisms in Your Local Area. Page 137  End of Unit Test				

2. Reproduction in Plants and Animals.	6	2.1 Reproduction and Breeding in Plants. Page 34 2.1.1 Reproduction of Plants. Page 34 2.1.2 The structure of Flowers. Page 35 2.1 Parts of a Flower. Page 36 2.1.3 Pollination and Fertilisation of Plants. Page 38	flowering plant, non-flowering plant, fern, breed, objective classify, local area, group, monocotyledon, asexual, sexual, spores, seed.	Classify plants as flowering plants and non-flowering plants and identify the differences. (10 points)	Parts of flowers.	Strand 1: Living and Family Standard Sc1.1
	8	2.2 factors Causing Pollination. Page 39  2.1.4 Technology and plant reproduction  Methods of Propagation. Page 43  2.3 Plant Propagation Page 47  Learning Activity 2.1: Reproduction and Breeding in Plants	pollination, cross- pollination, factor, fertilisation, propagation, budding, plugging, inarching, biotechnology, modification, cloning, tissueculture.	Categorize the factors causing pollination as human, animal, wind and water. (10 points)  Out of class activity to view flowering plants, non-flowering plants, monocotyledons and dicotyleddonsf. (10	Factors causing pollination and methods of propagation.	Observe and specify components of flowers and structures involved in reproduction of angiosperms.      Explain reproduction of flowers, plants, plant propagation, and apply acquired knowledge for useful purposes      Explain life cycles of some kinds of angiosperms
	9	2.2 Flowering Plant Life Cycle. Page 55  2.4 Flowering Plant Life Cycle. Page 55  Learning Activity: Flowering Plant Life Cycle. Page 59	life cycle, flowering, non- flowering, flower, product	Arranging pictures of different stages of a flowering plant in a logical order of their life cycles. (10 points)	Life cycles of flowering plants.	

Review for Midterm	10	REVIEW FOR MIDTERM TEST  Unit 4. Preservation of Living Organisms.  Unit 2. Reproduction in Plants.	Unit 4 and Unit 2 vocabulary.	Unit 4 and Unit 2 end of unit tests.	Unit 4 and Unit 2	Strand 1: Living and Family Standard Sc1.2 Strand 1: Living and Family Standard Sc1.1	
	11	MIDTERM TEST (20 POINTS)					
2. Reproduction in Plants and Animals.	12	2.3 Reproduction and Breeding in Animals. Page 60	Asexual, reproduction, budding, fragmentation,bi nary,fission, sexual, human, internal, external, fertilization, bubble, nest, behaviour, record, aquarium, asexual, sexual, fertilisation.	A power point presentaion on asexual reproduction, sexual reproduction, animal breeding, mating and technology and animal breeding. (10 points).	Basic definition Sexual reproduction Asexual reproduction Animal breeding Life cycle of animals	Strand 1: Living and Family Standard Sc1.1  4. Explain animal reproduction and propagation.	
		2.3.1 Animal reproduction. Page 60					
		2.5 How Do Fighting Fish Reproduce? Page 61					
	13	2.3.2 Animal breeding. Page 65					
		2.1.1 Artificial Insemination of animals that reproduce using internal fertilization					
		2.1.2 Artificial insemination of animals that reproduce using external fertilisation. Page 66					
	14	Learning Activity 2.3: Reproduction and Breeding in Animals. Page 70				5. Explain life cycles of some kinds of animals and apply acquired knowledge for useful purposes.	
		2.4 Animal Life Cycles. Page 72	give birth, laying eggs, appearance,	Draw, lable and summerize life cycles of a butterfly and a frog. (10 point)	Animal life cycles		
		Interesting Life Cycles of Different Animals. Page 73					
		2.6 Life Cycles of Animals. Page 75					
		End of Unit Test					
	15	Learning activity 2.4: Animal Life Cycles. Page 78					

		1.1 Properties of Materials . Page 8		List 10 object in your		
1: Properties of Materials in daily Life	16	1.1.1 Materials. Page 8	property, object, material, use	home and identify the materials they are made for objective score 10 points	Basic definition Materials and examples.	Strand 3: Substances and Properties of Substances Standard Sc3.1  11. Experiment and explain properties of various kinds of materials concerning elasticity, hardness, toughness, heat conductivity and density.  12. Search for data and discuss application of materials in daily life.
		1.1 Which Material is Harder? Page 8	scratch, material, hardness, softness	Experiment by scratching different materials to determine which are harder. (10 points)	Material hardness	
		Uses of the Property of Material Hardness. Page 12				
	17	1.2 The Toughness of a Material. Page 13	tough, elastic, conductivity, conductor, non- conductor	List material and where they are used most in daily life. (10 points)	Material toughness, elasticity and thermal conductivity.	
		1.3 The Elasticity of a Material. Page 16				
		1.4 The Thermal Conductivity of a Material. Page 19				
		Use of Thermal Conductors and Thermal Insulators	insulator, electrical, material.	Experiment on heat and electrical conductivity. (10 points)	Electrical conductivity	
	18	1.5 The Electrical Conductivity of a Material. Page 22 Uses of Electrical Conductors and Electrical Insulators. Page 24				
		Learning Actvity 1.1: Properties of Materials. Page 28				
		End of Unit Test				
Review for Final Exam	19	REVIEW FOR FINAL EXAM	Unit 3 and Unit 1 vocabulary.	Unit 3 and Unit 1 end of unit tests as well as the associated vocabulary.	Unit 3 and Unit 1	Strand 1: Living and Family Standard
		Unit 3. Reproduction of Animals.				Sc1.1
		Unit 1: Properties of Materials in daily Life				Strand 3: Substances and Properties of Substances Standard Sc3.1
	20	FINAL EXAM (30 POINTS)				